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RAICHUR DISTRICT

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PREFACE

EARLY in this century, the revised Imperial Gazetteer of India was published in 26 volumes, one of which was devoted to the princely State of Hyderabad, of which Raichur district formed a part; then followed the Hyderabad District Gazetteers in the third decade of this century. The significant and stupendous changes and developments that have taken place and are taking place in the various spheres in India, since the dawn of Independence, called for production of re-oriented Gazetteers with a novel pattern to meet the new national requirements. A reappraisal of several of the other previous features, in the light of the fresh data, also became imperative. Because of the special position of the district as a unit of administrative organisation and in social and economic life of the people, a self-contained and comprehensive volume entirely devoted to each one of the districts became highly desirable.

The Union Government, accordingly, sponsored a scheme for publication of new Gazetteers for all the districts in India, which number about 345, and asked the Governments of all the States and Union Territories to undertake the execution of this task of national importance and offered a grant-in-aid. In order to have a broad and basic uniformity in the pattern of the new Gazetteers, so that one can lay one's fingers readily on the matters required and know the trends of developments, the Central Unit, in consultation with the State Units, devised also a common plan of contents encompassing a wide range of topics. Since the days when a Gazetteer meant only a geographical index, the concept has vastly widened and the Gazetteers of the present age, which are polymathic works, have to cover large dimensions and have to give, in a new perspective, an integrated and objective picture, without losing sight of the greatly changed social values; this demands a good deal of caution and circumspection.

The modern Gazetteers are extra-ordinary publications dealing with a myriad variety of features which unfold the panorama

of the many aspects of the variegated life of the people and of the area they inhabit. Laborious and time-consuming processes are involved in their production. The District Gazetteers are the most comprehensive single source of knowledge about the districts. For the country as a whole and for the States, reference works on various subjects are available both for the specialist and general readers; but scarcely are there any reference works focussing on individual districts. The District Gazetteers fulfil this great need by delineating an all-round picture of individual districts. It is relatively more difficult to obtain required source-materials and isolate matters for a district than for a State as a whole. Particulars and data, if incomplete or inconsistent, do not lend themselves for treatment and persistent efforts are called for. A grave deficiency of many publications is that there is a yawning gap between the latest years of their facts and figures and the year of their actual production; this would be sharply felt all the more now when progressively more rapid and enormous developments and changes are taking place in the many fields. Every possible effort has been made to avoid that lacuna here.

By mirroring the past and present achievements and contributions, joys and woes and by indicating the potentialities of development in the future, of the various parts of the country, these unique series serve as a harmonising factor and help to dispel prejudices and parochial tendencies and to promote understanding of one another and national and emotional integration of the people.

This is the ninth District Gazetteer of this State. The chapters in the volume, being correlated, complement one another; for instance, the chapter on history gets supplemented elsewhere when the relevant background of various aspects is traced, and particulars pertaining to places of interest can be found in chapters other than the 19th also. No pains have been spared to keep abreast of developments in the many spheres and to gather and make use of the latest possible data from the diverse and scattered sources and to make the publication as accurate and self-contained

as possible. Useful appendices, an analytical and exhaustive index, a considerable number of illustrations, a scrupulous *addenda et corrigenda,* a detailed table of contents, a select bibliography and a general map of the district have been provided.

The State Advisory Board for Gazetteers, consisting of the Chief Secretary to the Government of Mysore as the Chairman and Sri D. C. Pavate, M.A. (Cantab), Sri V. L. D'Souza, B.A., B.com. (Lond.), Sri P. H. Krishna Rao, M.A., Prof. K. A. Nilakanta Sastri, M.A., and Prof. Dr. S. C. Nandimath, M.A., Ph.D. (Lond.), as Members, made many valuable suggestions in order to enhance the usefulness of the work. To all of them, hearty gratitude is due.

The Education and the General Administration Secretariats, a number of officers, at various levels, of the different Departments of the State Government and of the Union Ministries working in the State, as also many knowledgeable individuals and non-official institutions have been of help in a variety of ways and the Director and the Senior Deputy Director of Printing, Stationery and Publications, and the Assistant Director of Printing in charge of this work extended close co-operation in meeting the several requirements of printing of this voluminous work of an extraordinary character and warm thanks are due to all of them.

Further, I would be failing in my duty if I do not express grateful thanks to Dr. P. N. Chopra, M.A., Ph.D., Editor, District Gazetteers and the staff of the Central Gazetteers Unit, Ministry of Education, New Delhi, for their effective role in planning and co-ordinating the work of preparation of the District Gazetteers. The Unit scrutinised the draft of this volume with great care and made a number of helpful suggestions with a view to improving the standard and quality of the publication. It may also be mentioned here that a part of the expenditure incurred on the compilation and printing of the District Gazetteers is being met by the Government of India.

The preliminary draft of this Gazetteer had been compiled some years back during the tenure of office of the former Chief

Editor, Sri B. N. Sri Sathyan, B.A. (HONS.), and it has been revised as also brought up-to-date, on the lines of the previous volumes of the series. He had been at the helm of the highly onerous task of this office since its very inception and I take this opportunity to tender to him very cordial thanks. Sriyuths: A. Ramakrishnan, Administrative Officer, P. B. Srinivasan, K. Puttaswamaiah, J. N. Kamalapur, M. A. Narasimha Iyengar, B. S. Bhandari, K. C. Bheemaiah, N. Venkataswamy and N. V. Ranganatha Rao, Editors, the first six of whom have since left this office, K. S. Narayanaswamy, Office Superintendent, G. V. Subba Ramu, Stenographer, and other members of the staff, who rendered concerted and useful service, are sincerely thanked. Sri D. N. Nagabhushana Rao, who joined as an Editor recently, assisted in seeing the volume through the press.

Quality and thoroughness are of the highest value in an enduring work of this nature. A complex work of this magnitude, which is of abiding interest and importance to the society, cannot be just hustled through. (It is noteworthy that Documentation Centres abroad are preparing and issuing microfiche editions of old and new Indian Gazetteers, since these works constitute an incomparable basic research literature.) Within, however, several limitations, every strenuous endeavour has been made to attain the best possible quality and thoroughness, comprehensiveness and virtual up-to-dateness by bestowing constant and meticulous attention.

K. ABHISHANKAR,
Chief Editor,
MYSORE GAZETTEER.

BANGALORE-20,
18*th March* 1970.

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RAICHUR DISTRICT

CHAPTER I

GENERAL

THE district of Raichur has a hoary past. It has had an eventful and rich history beginning from the days of the Mauryan king Ashoka. A number of inscriptions, rock edicts and other records, temples, forts and battle-fields bear testimony to this fact. Lying between two important rivers, the Krishna and the Tungabhadra, this potentially rich tract had been a bone of contention between kingdoms. In the recent past, it was a part of the princely State of Hyderabad, and since the 1st November 1956, it is a constituent district of the Mysore State.

Origin of name

The district derives its name from its headquarters town, Raichur (Rayachooru in Kannada), as do most of the other districts also in the State. Though many of the villagers round about still call the place by the earlier form of the name which is Rachooru, however, in modern times, it has come to be generally written and pronounced in Kannada as Rayachooru. The name of this place which is of considerable antiquity, can be traced back to the twelfth century at least. As Dr. P. B. Desai has pointed out,* the Raichur fortress was one of the fortresses conquered by the Hoysala king Vishnuvardhana. This is evident from at least three of the Hoysala inscriptions in Kannada. In the earliest of these three inscriptions, which was found at Hulikere in Belur taluk of Hassan district (numbered Belur 193 in *Epigraphia Carnatica*, Vol. V, Part I, 1902) and which belongs to the year 1161 A.D. and to the reign of Hoysala Narasimha I, mention is made of the Perddore (the Krishna river) as the northern boundary of Vishnuvardhana's kingdom and of Rachavoor** as one of the places conquered by Vishnuvardhana while still a youth.

**Vide* his article on the name of Raichur in the monthly, "Kannada Nudi", Bangalore, of September 1969.

**In the English translation of the inscription in the *Epigraphia Carnatica* referred to above, this place-name has been written as Rajavoor, which is obviously a mistake in that context.

The second of these inscriptions, which was discovered at Hatna in Nagamangala taluk of the present Mandya district (numbered Nagamangala 70 in *Epigraphia Carnatica*, Vol. IV–Part II, 1898) and which is dated 1178 A.D. when Hoysala Vira-Ballala II was ruling, refers to Permmana (*i.e.*, Permma+na*) Rachavoor as one of the numerous forts which Vishnuvardhana captured 'with a frown'. This lithic record indicates that the place was known at the time as Permma's Rachavoor, this Permma being probably a local chieftain. The third of these inscriptions, which is from Hirehalli in Belur taluk of Hassan district (numbered Belur 137 in *Epigraphia Carnatica*, Vol. V—Part I, 1902) and which is dated 1183 A.D. and is also of the reign of Hoysala Vira-Ballala II, enumerates Rachanoor as one of the places which Vishnuvardhana captured by the might of his arm.

From the context of enumeration of places in these inscriptions and other accounts of exploits of Vishnuvardhana, it becomes clear that the place referred to above as Rachavoor or Rachanoor is Raichur of the present days. 'Racha' being derived from 'Raja' (*i.e.*, king) and 'oor' meaning a place or town, Rachavoor (Racha+oor) or Rachanoor (Racha+na+oor), means in Kannada 'king's place' showing that it was already an important town in the Kannada country. By 1294 A.D., Permmana Rachavoor or Rachanoor had been shortened into Rachoor or Rachooru as is clear from a Kakatiya inscription of that year found on the fort-wall of Raichur itself. That this form of the name for the place continued during the Vijayanagara times, at least upto 1541 A.D., is known from two Kannada inscriptions of that year** found at Alampur (now in Mahboob-nagar district of Andhra Pradesh) which says that king Krishnadevaraya captured Rachoor 'by his expedition in the north'. Thus, it is obvious that this historical Rachoor or Rachooru underwent a further slight change in recent times with the addition of 'ya' between 'Ra' and 'cha' (to become the present Rayachooru (Ra+ya+cha+ooru). The 'ya' here might be the second letter of the word 'Raya' meaning again king. In Hindi and Urdu, the equivalent of 'Raya' being 'Rai,' it seems to have become the practice to spell the name as Raichur in Urdu, later bringing that usage into vogue in English as well.

It is narrated that a chieftain, on witnessing a strange spectacle of a rabbit turning on a dog that pursued him and tearing the latter (dog) to pieces at this spot, thought that the scene of this heroic and unusual action was a fit place for building a fort, and accordingly constructed a formidable fort and named the place as 'Naichur' which, in Kannada, connotes the idea of the

*This being a possessive case suffix in Kannada.

***Ibid* Dr. P. B. Desai's article.

dog being torn to pieces. The present name, Raichur, is said to have been derived from that 'Naichur'. But this kind of story is repeated in respect of many forts. It is also said that 'Rai' meaning stone in Telugu, with 'ooru' (town), gave rise to 'Rajooru', that is, a town of stones (because of rocks in the vicinity), which became Rayachooru or Raichooru. These and such other stories can be said to be only conjectures, in view of the clear historical evidence about the name already explained. It appears that Raichur had been once renamed Ferozenagar by a Bahmani Sultan, but the appellation did not stick on to it and it continued to be called by the old name only.

Location

The district, which is situated in the north-eastern part of the Mysore State, falls within the northern *maidan* region, the chief characteristics of which are large expanses of treeless plains, black soil with a bare hillock here or a boulder there and some lower belts following the main rivers. It lies betwen 15° 09′ and 16° 34′ north latitude and 75° 46′ and 77° 35′ east longitude and in between two major rivers, namely, the Krishna and the Tungabhadra, as already stated. The general slope of the district is from the north-west towards the south-east, its average height above the mean sea-level being just 1,311 feet.

General boundaries

The district is bounded on the north by the district of Gulbarga, on the west by the districts of Bijapur and Dharwar, on the east by the district of Mahboobnagar of Andhra Pradesh, and on the south by the districts of Kurnool, also of Andhra Pradesh, and Bellary. The two rivers, the Krishna and the Tungabhadra, form the entire northern and southern boundaries of the district.

Area and population

The geographical area of the district, according to the Central Statistical Organisation of the Government of India, is 14,013 sq. kilometres, which works out to 5,410 sq. miles. But the reporting area of the district for land utilisation purposes, as worked out by the Commissioner for Survey, Settlement and Land Records in Mysore, Bangalore, is 14,007.9 sq. kilometres or 5,435.5 sq. miles. This slight difference is due to the different methods employed by them in measuring the area. The population of the district, according to the 1961 census, was 11,00,895. In terms of area, the district occupies the third place among the districts of the State, while in respect of population it occupies the tenth place. It accounts for 7.36 per cent of the total area and 4.66 per cent of the total population of the State in 1961; the density of population then worked out to 202.51 per square mile or 77 per square kilometre and this was much below the State average, which was 319 per square mile or 123 per square kilometre, and the lowest next only to North Kanara district.

ory of district as administrative unit

The district of Raichur was a part of the Hyderabad State till the re-organisation of States on 1st November 1956. The recorded history of the district is traced to as far back as the third century B.C. The fact that three minor rock edicts of Ashoka are found in this district, one at Maski in the Lingsugur taluk and the other two near Koppal, prove that this area was included in the dominions of the great Mauryan king Ashoka (273-236 B.C.). At that time, this region was under the governance of a Viceroy or *Mahamatra* of Ashoka. Early in the Christian era, the district appears to have been a part of the kingdom of the Satavahanas. The Vakatakas, who reigned during the 3rd and 4th centuries A.D., seem to have held sway over Raichur for sometime, after which it appears to have been included in the Kadamba dominions. The next dynasty of importance, which ruled over this region, was that of the Chalukyas of Badami. According to an inscription from Aihole, Pulikeshi-II, having defeated the Pallavas, occupied this area and made it a province in his empire under the governance of his son Adityavarma. Later, the whole of the present Raichur district was included in the dominions of the Rashtrakutas, who rose to power in the eighth century, as could be gathered from the inscriptions of that period found in this district. According to an inscription from Manvi taluk, one Jagattunga, a subordinate ruler under the Rashtrakuta king Krishna-II, was ruling the province of *Adedore Eradusaviraprant*a, *i.e.,* the area constituting the present Raichur district. Nripatunga, a Rashtrakuta king, has described Koppal in his Kannada work, *Kavirajamarga,* as "the great Kopananagara".

Numerous inscriptions of the Chalukyas of Kalyana, found in the various parts of the district, testify to the fact that this region was under their sway for a considerable length of time between the 10th and 12th centuries A.D. It is learnt from an inscription found at Naoli in Lingsugur taluk that during the reign of Chalukya Vikramaditya-V, the *Adedore-pranta, i.e.,* the Raichur region, was being ruled by his younger brother Jagadekamalla-I. Another inscription from Maski describes the place as a capital and makes a reference to the reign of Jayasimha. There were, however, frequent wars between the Chola kings of the south and the Chalukyan kings of Kalyana for supremacy over the Raichur region and the territory had passed into the hands of the Cholas for a brief period. The Haihayas and Sindas also seem to have ruled some parts of this region for sometime. Later, after the fall of the Chalukyas, Raichur passed into the hands of the Kalachuri kings. Then came the Kakatiyas in the 13th century. From an inscription on the fort-wall of Raichur, referred to earlier, it is learnt that the original fort was built by one Gore Gangayya Reddy, a general of the Kakatiya queen Rudramma Devi of Warangal, in 1294 A.D., at the instance of the latter.

An object of dispute

The Hoysalas also exercised sovereignty over Raichur for several years during the twelfth century. The three inscriptions relating to the times of two Hoysala kings referred to earlier clearly indicate that Raichur was under the occupation of Vishnuvardhana. The Yadavas of Devagiri also held sway over the region for some time. Later, during the Vijayanagar rule, Raichur had become an object of constant dispute between the Vijayanagar kings and the Bahmani Sultans of Gulbarga and the Adil Shahs of Bijapur. Often did it become a battle-field between the parties and changed hands frequently. However, during the period of the first dynasty (the Sangama dynasty) of Vijayanagar, Raichur formed a part of Vijayanagar empire for a long period notwithstanding the periodic fights between the contestents. It was one of the strongest frontier forts of the Bahmani kings towards the close of the 15th century, after which it was incorporated in the Adil Shahi kingdom of Bijapur. Again, under Krishnadevaraya, Raichur gained great eminence. In the historic battle of Raichur of 1520 A.D. between Krishnadevaraya and the Adil Shahi Sultan of Bijapur, the latter's army was routed by the Vijayanagar forces and Raichur was recaptured. However, after the fall of Vijayanagar in 1565, Raichur again fell into the hands of the Muslims, and later became a part of the dominions of the Nizam of Hyderabad. Under a treaty entered into in 1853 by the Nizam with the East India Company, the district of Raichur was assigned to the British; but it was later on restored to the Nizam under another treaty concluded in 1860. (For more details, please *see* Chapter II.)

Territorial adjustments

Till 1905, the tract lying between the two rivers, the Krishna and the Tungabhadra, *i.e.*, the Raichur doab region, consisted of two districts, *viz.*, Raichur and Lingsugur. The Raichur district consisted of the taluks (tahsils) of Raichur, Yadgir, Yergera, Deodurg, Manvi, Alampur and Gadwal, while the taluks of Lingsugur, Kushtagi, Gangavati, Sindhanur, Shahpur and Shorapur constituted the Lingsugur district. Besides, the taluks of Koppal and Yelburga, which were jagirs of Sir Salar Jung, constituted a separate Jagir district. In 1905, the Lingsugur district was abolished and the Yergera taluk was divided between the adjoining taluks of Raichur, Manvi and Deodurg. The taluks of Shahpur, Shorapur and Yadgir were transferred to the Gulbarga district. All the taluks which formed the Lingsugur district, were added on to the Raichur district. The Raichur district thus came to have then the following nine taluks, *viz.*, Raichur, Manvi, Deodurg, Sindhanur, Gangavati, Kushtagi, Lingsugur, Alampur and Gadwal.

Anegundi, in Gangavati taluk, was a *Samsthana* under the Raja Saheb of Anegundi. Similarly, Gurgunta in Lingsugur

taluk was also a *Samsthana*. They were amalgamated with the Hyderabad State after the Police Action, in 1948.

The abolition of the jagirs in Hyderabad State in 1949 resulted in the conversion of jagir taluks of Koppal and Yelburga into regular taluks and their inclusion in the Raichur district. Further territorial adjustments were made at the time of the States' Re-organisation in 1956, when the taluks of Gadwal and Alampur were transferred to Andhra Pradesh. Thus, in its present form, the Raichur district comprises the following nine taluks, namely, Raichur, Manvi, Deodurg, Lingsugur, Sindhanur, Kushtagi, Koppal, Yelburga and Gangavati. For administrative convenience, the district has been divided into three revenue sub-divisions, each consisting of three taluks, as follows :—

1. *Raichur Sub-Division*

   Raichur
   Manvi
   Deodurg

2. *Lingsugur Sub-Division*

   Lingsugur
   Sindhanur
   Kushtagi

3. *Koppal Sub-Division*

   Koppal
   Yelburga
   Gangavati

The reporting area, for land utilisation purposes, of the several taluks, the number of villages in each taluk and the population of each taluk are given in the following table :—

Sl. No.	*Name of taluk*	*Area in*		*No. of inhabited villages*	*Population (as per 1961 Census)*
		Square kilometres	*Square miles*		
1	2	3	4	5	6
1.	Deodurg	1,540.1	591.6	167	1,03,855
2.	Gangavati ..	1,331.0	513.9	136	1,13,258
3.	Koppal ..	1,401.0	542.1	138	1,30,571
4.	Kushtagi	1,387.5	535.7	164	1,05,947
5.	Lingsugur ..	1,914.5	739.2	182	1,35,253
6.	Manvi ..	1,940.9	749.4	159	1,23,677
7.	Raichur ..	1,521.6	587.[illegible]	152	1,74,355
8.	Sindhanur ..	1,626.0	627.8	127	96,957
9.	Yelburga ..	1,412.3	545.3	139	1,17,022
	Total ..	14,077.9	5,435.5	1,364	11,00,895

Each of these taluks has been further sub-divided into revenue circles or hoblies and there are, in all, 56 such hoblies in the district as shown below:—

Sl. No.	*No. of hoblies*	*Name of hoblies*	*Taluks to which attached*
1	2	3	4
1.	4	Deodurg	Deodurg taluk
		Gabbur	,,
		Jalhalli	,,
		Arkera	,,
2.	8	Gangavati	Gangavati taluk
		Venkatgiri	,,
		Kanakgiri	,,
		Naoli	,,
		Karatgi	,,
		Hulihaidar	,,
		Siddapur	,,
		Marli	,,
3.	4	Koppal	Koppal taluk
		Alawandi	,,
		Erkalgad	,,
		Hittanhal	,,
4.	4	Kushtagi	Kushtagi taluk
		Hanamsagar	,,
		Gudadur	,,
		Tawargera	,,
5.	4	Lingsugur	Lingsugur taluk
		Mudgal	,,
		Maski	,,
		Gurgunta	,,
6.	9	Manvi	Manvi taluk
		Hirekotankal	,,
		Kurdi	,,
		Kallur	,,
		Sirvar	,,
		Malat	,,
		Kavital	,,
		Pamankallur	,,
		Halapur	,,
7.	6	Raichur	Raichur taluk
		Yergera	,,
		Gillesugur	,,
		Kalmala	,,
		Chandarbanda	,,
		Devarsugur	,,

1	2	3		4
8.	11	Sindhanur	..	Sindhanur taluk
		Gorebal	..	,,
		Jalihal	..	,,
		Gunjalli	..	,,
		Turvihal	..	
		Gudur	..	,,
		Kuntagi	..	,,
		Balganur	..	,,
		Valkamdinne	..	,,
		Baderli	..	,,
		Hedginhal	..	,,
		Jawalgera	..	,,
		Salgunda	..	,,
		Huda	..	,,
9.	3	Yelburga	..	Yelburga taluk
		Kuknur	..	,,
		Bandi	..	,,

Natural divisions

The whole of the district lying, as it does, between the two great rivers, the Krishna and the Tungabhadra, is generally referred to as the Raichur doab. Roughly, the western portion of the district is a plain country, bleak in aspect and scanty of vegetation, while the eastern portion has a few hillocks and scrub jungles. This latter portion has an undulating surface with a soil of red colour, while the plains of the western portion contain good black alluvial soil.

Hills

There are no continuous ranges of hills worth mentioning in this district. There are, however, a few clusters to the east and south of the district. One range extends from the north-west of Raichur towards Yergera for about fifteen miles, another runs in the Raichur and Manvi taluks for about ten miles and a third extends south of Raichur towards Alampur in Andhra Pradesh. Most of these hill clusters are made up of granite rocks. The scenic aspect of these granitic hills is not very picturesque, since they are bare of vegetation. Some of them have fantastic shapes, piled up in heaps of all sizes and are difficult of ascent. In several places, a high rock is supported only by a couple of small boulders under it. There is another chain of small hills in Kushtagi taluk, originating from the Badami group of hills in Bijapur district and running into Gangavati taluk. This chain is locally called Yemme-gudda. The granitic rocks of the district decompose by exposure, and the decomposed soil is sandy and does not possess the fertility of the black soils.

The hill ranges of the district belong neither to the Eastern Ghats nor to the Western Ghats, but represent erosional remnants of an uplifted plateau and are mostly made up of metamorphic schists and granitic gneisses of pre-cambrian age. Among the important hill-peaks in the district may be mentioned the Jagadgudda (2,101 feet), 20 miles east of Kushtagi, Moriguddа (1,992 feet), 16 miles south-east of Sindhanur, Nishanigudda (1,933 feet), seven miles north-east of Kanakgiri, Durgadagudda (1,911 feet), one mile south-east of Sindhanur, and Mallabad peak (1,762 feet), four miles south of Raichur, as also the Manvi (1,836 feet) and Masarkal (1,774 feet) peaks.

Topography

The undulating black cotton soil strips, cut by numerous nalas, characterise the region of the Dharwar schists, which is now practically denuded of trees and presents a monotonous landscape, while the gneissic region is generally more or less broken and covered with a thin mantle of red loamy soil. Gneissic hills, wherever they occur, form bold reliefs in the landscape. The sedimentary formations, which cover a small belt of the region adjoining the confluence of the Krishna and the Tungabhadra rivers, occupy more or less flat plateaus.

Regionally viewed, the hills in the area present some structural features which are of interest in relation to the geology of the area : (1) Taking the most south-westerly group, the hills of Karigudda, Manvi and Rabbankal show a continuity along roughly north-west south-east directions; (2) from Sirvar and Yermasagar, running in a roughly south-east direction, may be recognised the hills of Madhugiri, Neermanvi, Gorkal, Kurvi and the one two miles west of Kamalahatti: (3) between Masarkal and Gabbur, a number of gneissic hills are seen at Kakargal, Jinnapur, Hungundabad, Ramdurg, Jagatkal, Khardigud, Maladkal and Gabbur. The hills around Uttanur are seen to be in line with the south-western group of hillocks in the above area. In the schist band itself, the isolated hills of Gauckal and Nilagal, as also the hill-clusters around Kalmala and Kallur, are seen to be situated in the same north-west and south-east disposition as that of the group of gneissic hills enumerated above; and (4) the hills around Raichur, which constitute a prominent landmark in the area, may also be seen roughly to display north-west and south-east trends.

Rivers

The only two rivers of importance in this district are the Krishna and the Tungabhadra, which form the entire northern and southern boundaries of the district, respectively. They have been associated from time immemorial with religious and cultural activities and have several famous shrines on their banks. Picturesque spots on their banks have been also abodes of spiritual *sadhana*. In the historical and cultural development of the country, the great rivers have played a vital role. Legend

and tradition have sanctified these perennial sources of water, which have given an immense impetus to civilisation and prosperity of the land. These beneficent rivers have exercised a strong influence on the life and imagination of the people.

Krishna river

The Krishna seems to have been serving as an artery of commerce since ancient times. The river must have been navigable a long way inland during the early centuries. Dr. Pandurangarao Desai is of the opinion that Ptolemy referred to this river, at least in its lower course, as Maisolos, which name has survived in the modern Masulipatam. He also says that the river Krishna is typical of the Deccan rivers; its maximum flood discharge is said to be almost double that of the Nile river, while in summer it dwindles down to a mere 100 cusecs. But all the same, it is a perennial river and has been the source of livelihood for a number of villages and towns on its banks. The bed of the river is rough and stony. It has low banks and is about half-a-mile wide. It has a few islands in it and when the river is in flood, it is difficult for the inhabitants of the island villages to communicate with the people of the mainland. In the rainy season, when the river generally overflows its banks, its waters enrich the soil with a rich deposit of natural manure and there is a luxuriance of crops on these lands.

The Krishna is also called Hire-hole (big or great river) in the region, and old Kannada inscriptions mention it as Perddore with the same meaning. The river has its source in the Western Ghats north of the Mahabaleshwar hill station. In its upper course, it rushes through deep and narrow gorges. While flowing through the broken ridges of the Dharwars in the Deccan proper, it receives many streams. It enters the Raichur district to the north of Uppinhal village in Lingsugur taluk and flows for a distance of about 104 miles in the district. There is a steep drop in the level of the river in its course through this district, as much as 300 feet, in a distance of about three miles. The river Bhima joins this river to the north of Kadlur in Raichur taluk. About 15 major and 21 minor streams and nalas also flow into the river along its course, important among them being the Hutti nala (30 miles), Chiksugur nala (22 miles), Ramdurg nala (20 miles), Mandargi nala (19 miles), Kodihal nala (17 miles), Ramanhal nala (16 miles), Hirebudur nala (15 miles) and Timmapur and Budadipad nalas (14 miles each). The river leaves the district north of Budadipad village in Raichur taluk and enters Andhra Pradesh.

Its mythical association

There have been ample references to the Krishna in the old literature of the country. The Puranas speak of the Krishna as Krishnavenya or Krishnavena. The Jatakas know it as Kanhapenna and in the Hathigumpha inscription of Kharavela,

it is mentioned by the name of Kanhapemna*. According to the Skanda Purana, which has a 'Krishna Mahatmya', this river 'was brought to the earth from the heavens'. The Padma and Brahma Puranas also narrate the 'merits' and benefits that accrue to those who live in the vicinity of the banks of this river and speak of it as the mother of rivers and as the fountain-head of holy places. She is described as the Ganga of South India.

A legend says that in the early part of the Kaliyuga, some *rishis* were greatly depressed by the decrease of righteousness and increase of evil deeds. They approached the resourceful Narada who assured them that a remedy would be found to help the good and the saintly. Narada conveyed the grievances of the *rishis* to his father, Brahma. The latter created a number of *teerthas* and also requested Vishnu to go to the assistance of the *rishis*. Then, Vishnu created the Krishna out of his own body. Meanwhile, the king of Sahya mountain had come to know that a holy river was to be created on the earth. He wanted to have the privilege of giving rise to such a sacred river so that he may attain salvation. Hence he did severe penance praying that that river may be born on the Sahyadri. His prayer was granted and, accordingly, the Krishna appeared on this mountain.

Tungabhadra

The Tungabhadra is formed by the union of two rivers, *viz.*, the Tunga and the Bhadra, both of which rise at Gangamula in the Varaha Parvata of the Western Ghats. This is also a perennial river, very deep in certain places and almost unfordable even in the dry season. This river enters the district near Kesalapur village at the south-western tip of Koppal taluk. The general slope of the land in the district being north-west to south-east, the Tungabhadra has a large number of rivulets and streams serving as tributaries, as compared to the Krishna. But none of these streams is of any great importance by itself and they generally go dry during the summer.

Old Kannada inscriptions have hailed the river as the Ganga of South India. In the past, notably during the days of Vijayanagar kings, it had been dammed at several places for purposes of irrigation and, in this district also, anicuts of large blocks of stones were constructed in several places in Koppal and Gangavati taluks. Canals were laid along both sides of the river. Most of these canals had been silted up and the water courses were in a dilapidated state. If kept in constant repair, these canals can serve as effective means of irrigation for the cultivation of rice and sugarcane, in places not benefited by the recent Tungabhadra Dam at Munirabad. The Tungabhadra river also is reputed as one of the important rivers of South India.

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*Immortal India, Vol. IV, by J. H. Dave, Bharatiya Vidya Bhavan, Bombay, 1961, pp. 42 to 44.

The river which forms the southern boundary of the district, flows for a distance of about 130 miles along the district touching the taluks of Koppal, Gangavati, Sindhanur, Manvi and Raichur and leaves the district to the south-east of Talamari village in Raichur taluk. As stated above, a number of streams and nalas flow into the river along its course in the district, the more important among them being the Maski nala (70 miles), Hirehalla (50 miles), Alawandi nala (20 miles), Sindhanur nala (50 miles), Siddapur stream (32 miles), Marli stream (26 miles), Inchnal nala (50 miles), Kanakgiri nala (32 miles), Nandihal nala (26 miles) and Kapgol nala (24 miles).

Its mythical association

There are several references to the river Tungabhadra in the Puranas. It was popularly known, especially in the Ramayana, by the name Pampa. Tungabhadra is mentioned in the Bhagavata. The origin of the river is also mentioned in the Tungabhadra Mahatmya of the Brahmanda Purana. It is said that Hiranyaksha seized the earth and hurled it down into the water, whereupon the gods and goddesses complained to Lord Vishnu, who, assuming the form of Varaha or Boar, destroyed the demon with his tusks and lifted up the earth which was submerged in water. The perspiration arising from the exertion of the Varaha trickled down its tusks on the Varaha-Parvata and gave rise to two rivers, that from the left tusk being the Tunga and that from the right tusk, the Bhadra.

In the Maheshvara-khanda of the Skanda Purana, Nandikeshvara tells Markandeya Maharshi that "some people attain salvation on the banks of the Ganga, some on the banks of the Saraswati some on those of the Krishnaveni and the rest on those of the Tungabhadra". The Matsya Purana, again, enumerates Tungabhadra as one of the sacred rivers issuing from the Sahya mountain. The Mahabharata mentions the Tunga along with the Jahnavi (the Ganga) and the Krishnaveni (the Krishna) as a sacred river.

Water drainage

While the Krishna river flows in the district in a general west-north-east and east-south-east direction till it meets the Tungabhadra in Andhra Pradesh, the Tungabhadra has a north-west direction as it touches the western portion of the district. After flowing in this direction for about ten miles, the Tungabhadra turns eastwards, and making a loop near Kurnool, it flows north-east again, to join the Krishna at Arlapadu in Andhra Pradesh. The drainage is mainly towards the Tungabhadra. Two distinct systems of tributaries feed these two rivers; the group flowing into the Krishna has a north to north-east course and that emptying into the Tungabhadra a south to south-east disposition.

The watershed of the area is roughly the 1,300 feet contour and corresponds generally with a high ground on which the Raichur-Lingsugur road is laid. To the east of the railway line, the watershed continues in the same direction. The streams to the south of this water-parting, flow into the Tungabhadra and those to the north join the Krishna. On an average, the sub-soil water in the district is struck at 30 to 40 feet from the ground level.

Geology*

The main rock types occurring in the Raichur district may be arranged in the following sequence :—

1. *Dharwars.*—Quartzites, quartz schists, quartz porphyrites, diabasic schists, ferruginous quartzites, chlorite, talc and talc-chlorite schists;

2. *Peninsular gneissic complex.*—Pink and grey gneisses;

3. *Dykes.*—Dolerite and epidiorite dykes;

4. *Kaladgi Series.*—Pebble beds, sandstones and conglomerates; and

5. *Soils.*—Reddish, light green, reddish-brown and black soil.

Dharwars

The Dharwar series of rocks occur in the form of three small but prominent bands—the Kushtagi band, the Maski band and the Raichur band. Minor patches are also to be seen in Gangavati, Yabbalu, Ullanur, Timmapur, Valkamdinne, Ganekal and Yermaras. The rocks constituting the Kushtagi and Maski bands, as also the minor patches, consist of metamorphic series, namely, chlorite schists, talc schists, banded ferruginous quartzites, hornblende schists, diabasic schists and amphibolites with their intrusives like quartz reefs and veins. The rocks constituting the Raichur band consist of chlorite, hornblende and diabasic schists and their reconstituted varieties. Quartz reefs and quartz veins occur in plenty in the Maski band, much more so than in the Kushtagi band. They occur in parallel lines in the schist members and conform to the strike and dip of the schist rocks. The quartz reefs can be broadly classified into three groups: (1) white quartz reefs, (2) slate-blue quartz reefs, (3) pale-blue and white quartz reefs. Of these three, the slate-blue quartz is of great importance on account of its auriferous nature. These auriferous quartz veins are mostly confined to the hornblende schists. The Hutti Gold Mine is situated in the Maski band.

*A fairly detailed and exhaustive report on the geology of Raichur district has been published in the journals of the Hyderabad Geological Survey, Vol. II, Part I and Vol. III, Part I.

The white quartzites occur associated with quartz schists and ferruginous quartzites while the pale-blue quartz reefs are mostly confined to the diabasic trappoid schists of the Maski band. These two latter varieties are not gold-bearing.

Peninsular Gneissic Complex

The gneissic rocks can be broadly divided into two types—the grey variety and the pink variety. Generally, the northern and the southern portions of the district consist of the pink variety while the middle portion consists of the grey variety. In certain places, however, there is an intermingling of both varieties.

Dykes

In the eastern portion of the district are seen a large number of dykes which are mostly doleritic in composition.

Kaladgi Series

The *Kaladgi* series of rocks occur over an area of about ten miles in the north-western portion of Kushtagi taluk. These rocks consist of alternate layers of conglomerates and sandstone laid almost horizontally over the denuded surface of the gneisses. Another series of rocks consisting of rounded pebbles of quartzites occur loosely spread over an area of about two miles near Kachapur and Gundsagar. On account of the situation of this pebble-bed at the same level as the Kaladgi conglomerates, it is surmised that these rocks are derived from the Kaladgi series.

Soils

The reddish sandy soil is confined to the zones of the pink gneisses in the neighbourhood of Gangavati, Kushtagi, Mudgal, Jalhalli, Deodurg and Sirvar. The light grey loamy soil, which is developed where the grey granitoid gneisses occur, is found near Kavital and certain ohter places. The reddish brown soil is confined to the areas where the diabasic schists and basic dykes occur. Such soil is to be found in the neighbourhood of Chikhesrur and other localities. The major portion of the district comprises black cotton soil, occurring both near the hornblende schists and the gneisses and also sometimes far away from the place of origin.

Minerals

As in other parts, the Dharwar rocks of the district are fairly rich in economic minerals. Important among them are gold, iron, copper, galena, quartz, mica, feldspar, ochres, ilmenite, building stones and laterite brick earth.

Gold

The Raichur district contains fairly good deposits of gold. Next to Kolar, this is the only other district now producing gold in the State. The occurrence of gold in this district is mostly confined to the Maski band of the Dharwar schist rocks. The gold-mining industry in the district seems to have been carried on even in very old times as evidenced by the numerous old workings found scattered all along this band. There appears to have been fairly intensive prospecting done for gold in those early

days. But, as we know, the ancient mining activities were limited upto the water zone. The modern gold mining industry, started in the year 1889 at Hutti by an English Company called the Deccan Mining Company, carried on the work not only in Hutti, but also in places like Tupdur, Topaldoddi, Wandalli, Chincherki, Udbal, Deodurg and Hunkuni. Many of these mines had to close down later on for reasons of finance and other economic considerations. The year 1947 saw the resumption of the work in the Hutti mines by the Hyderabad Gold Mines Company Limited (now redesignated as the Hutti Gold Mining Company), and since then the gold mining industry in this area has been getting on well.

Iron

Iron ore of low and medium grades occurs near Rajavoli as lateritic segregations of ferruginous minerals, along the Kushtagi band of the Dharwar schists and near Jadagudda hill.

Copper

The occurrence of copper is reported in the old iron workings near Machnur in the form of cupric oxide and basic carbonate and also near Mandargi, Chikhesrur and Hirehesrur.

Galena

Galena occurs in the vicinity of Mudbal in quartz veinlets.

Mica

The occurrence of mica in pegmatite is reported near the following places, namely, Yabbalu village, Sindhanur, Harbal, Hanchnal and also south of the main road leading from Tawargera to Kushtagi.

Quartz

A number of white quartz reefs, suitable for glass and ceramic industries, occur at several places in the district. The more important reefs, which are in close proximity to the railway line, are located at Sultanpur, in the Jagarkal and Mallapur area, between Valkamdinne and Bichal and also at Yedakuur and Induvasi. Quartz of good quality is also found near some abandoned gold mines in Hutti, Uddinhal and Sangapur areas.

Feldspar

Potash feldspar occurs in the neighbourhood of Parthipalli, Turkandona, Matmari and a few other places, all situated within an area of about five miles from Matmari railway station.

Ochres

All along the flanks of the ferruginous quartz bands of the hills west of Nandihal and also on the eastern slope of Kalmangi hill, hematitic ochres occur in large quantities.

Ilmenite

Black sand containing ilmenite occurs along the bank of the Krishna river in the northern portion of Lingsugur taluk. The average content of titanium in the sand is just over six per cent.

Saline Efflorescence

Deposits of saline efflorescence occur along the junction zone of the Dharwar formations and the peninsular gneissic rocks in the eastern portions of the district, while saline salts are found in Sindhanur. Lingsugur, Manvi and Raichur.

Building and ornamental stones

Various types of granites, gneisses and dyke-rocks occurring in the district serve as good material for building and constructional works and also for road metal. The granite quarries are found mostly at Raichur and Manvi. The gneisses occurring at Lingampalli, Raichur and Munirabad have proved to be of great economic value. The slaty hornblende schist occurring along the north-eastern slopes of the Nandihal hill produces thin slates and slabs. The thick slabs are used for flooring purposes. The sandstones occurring near Hanamsagar also make good slabs for building purposes and milestones. Some varieties are also suitable for carving purposes.

Soapstone

Deposits of soapstone are noticed at the following places in the district : (*a*) about half-a-mile to the east of Edlapur by the side of Tawargera-Maddur road ; (*b*) about three furlongs to the south-east of Kadlur village in a cultivated land covered with black cotton soil ; and (*c*) about two miles to the east of Budigumpa on the Lakshmigudda hillock in Gangavati taluk. The deposits run here in a north-south direction for about a furlong and are somewhat harder than the types found in other places.

Brick earth

A gritty type of murram earth, useful for making bricks and tiles, occurs near Maski and Kavatgi.

Forests

Except, perhaps, the banks of the two major rivers, the whole of the district is practically devoid of forest vegetation. The rainfall is inadequate and erratic. There are no distinct hill ranges owing to the geological formation of the land. The dry tropical climate is also not helpful to forest growth. Added to all this, whatever forest cover the district possessed in the remote past, has been destroyed by man in his persistent effort to clear such land for the cultivation of his foodgrains, for the grazing of his cattle and for collecting fuel and timber. The process of erosion in this district has also had its part to play in the gradual desiccation and deterioration of the top and sub-soils. The water table has gone down considerably.

The forests in Raichur district, as they exist to-day, are of the mixed dry deciduous type, consisting of open scrub jungle, full of weeds and bushes, except in a few parts where some timbers of economic value are grown. The conditions of drought and extreme heat of the summer season preclude any active and profitable regeneration of forests. The area of forest land is only about four per cent of the district's total area, as against the

minimum of 33-1/3 per cent desirable according to the national forest policy. The belts of vegetation that can, if at all, be called forests are confined to the upper and lower reaches of the rivers and are to be found in the taluks of Manvi, Lingsugur, Kushtagi, Deodurg and Sindhanur. The taluks of Koppal and Yelburga are entirely devoid of forest land, while Gangavati and Raichur taluks cannot lay claim to any appreciable areas under forest. The total forest area in the district in 1968-69, including protected and unclassified forests, was about 1,63,103 acres. Of this, about 20,000 acres were covered under the mixed dry deciduous forests. In general, the forest area is very much understocked.

Flora

The weeds and climbers found in the forests of the district are not of any great economic value. Even different types of grass grown are not of the nutrient type for the cattle and, therefore, are more useful for thatching roofs of village houses. The minor forest produce consists of *Tarwad* bark, *Tupra* (beedi) leaves, Rousa grass, *Sharifa* or *Seetaphal*, honey and wax, soapnut and tamarind. The most common shrubs are the *Bel Palas* (Butea superba), *Dikmali* (Gardenia gummifera), *Gotti* or *Challe* (Zizyphus xylopyra), *Sharifa* or *Seetaphal* (Anona squamosa) and *Tarwad* or *Tangadi* (Cassia auriculata) and are mostly used for fencing the fields. The following are the main tree species found in the district, all of which have been classified generally as belonging to the third class :—

Cassia fistula ('*Kakke*' or '*Amaltas*').—The wood of this species is durable. The pulp of the fruit of the tree is used for preparing laxatives.

Acacia arabica ('Jali' or 'Babul').—The wood of this tree yields a gum and is of pale-red colour, turning darker on exposure. It becomes very durable when seasoned in water. The wood is used for preparing spokes for wheels of country-carts, rice-pounders and wooden ploughs.

Tamarindus indica ('Imli' or 'Hunise').—The tamarind fruit is mostly used in culinary requirements. The seeds are also roasted and eaten by the villagers. The heartwood of the tree is very hard and durable. The wood is used as fuel and also for preparing cart-wheels and the like.

Pongamia glabra ('Honge' or 'Karanji').—The wood of this tree, though tough, is light. When cut, it presents a white colour but turns yellowish on exposure. The honge seeds are used for extracting oil, which is used for burning lamps, and also for medicinal purposes; the oil-cake is used as manure. The *honge* leaves are also used as green manure.

Wrightia tinctoria ('Hale' or 'Pala-Kordsha').—The wood of this species is highly valued by the rural population on account of its ivory-white colour. It is used for making toys. The leaves of this tree turn black when dried and afford a kind of indigo called pala-indigo.

Butea frondosa ('Palas' or 'Muttaga').—A kind of red gum is obtained from the bark of this tree. The flowers are used to prepare a red juice which is sprinkled on relations and friends during the *Holi* festival. The wood of this tree is of little value.

Anogeissus latifolia ('Tirman' or 'Dindiga').—The tree is mostly used as fuel and for making charcoal. The heartwood of the tree is small, purplish-brown and very hard. The sapwood is yellowish in colour. The wood has a tendency to split while seasoning. The gum of this tree is used by calico printers for dyeing purposes.

Albizzia amara ('Chujjalu').—The heartwood of this tree is purplish-brown and is very hard and durable. The wood is generally used for preparing country-carts and agricultural implements.

Chloroxylon swietenia ('Huragalu').—This is also called the Indian satin-wood because of its softness. It has a fine satiny lustre and is well adapted for delicate cabinet work, in carpentry and turnery.

Pterocarpus marsupium ('Bijasal' or 'Honne').—The wood of this tree is close-grained and its colour is of reddish brown. It is tough, strong and durable. It seasons well and takes a good polish. The wood is used for making of furniture, country-carts and agricultural implements.

Hardwickia binata ('Karachi' or 'Kammara').—This is one of the most durable timbers and is used in construction work. The heartwood is close-grained, dark and ringed with purple. When cut, the wood of this tree becomes very hard. The young shoots and leaves are used as fodder.

Terminalia tomentosa ('Nallamaddi' or 'Matti').—The wood of this tree is very durable and is largely used as fuel. It yields a gum which is said to be used as an incense and cosmetic. Its bark is used for tanning purposes.

In addition to the above species, *Celastrus sengalensis, Sapindus emarginata, Acacia sundra, Zizyphus xylopyra, Dodonea viscosa, Ficus bengalenisis* and *Dalbergia latifolia* are also found in the district to a little extent.

Not so important as the above are the *Bhilava* or *Geru*, the *Chinangi*, the *Bagi* and the *Kempukaira* found in the forests of the district.

Fauna

The scantiness of vegetation accounts for almost a total absence of denizens of the forest that can be said to belong to the big game variety. The presence of tigers in this area has almost been unknown, though a member or two of this species are said to be found, rather rarely, in one or two rocky hills in the forest belts. An occasional leopard may also be seen far from human habitation in one or the other of the rocky hills. It would not be incorrect to say that even this animal is now almost extinct. The hyena is to be found not infrequently. It is locally called the *Kattegarka*. Wolves are found in the craggy portions of the hills. Curiously enough, there are not many jackals. As winter sets in and there is a welcome nip in the air, herds of small deer appear as from nowhere in the rolling plains. As in the other dry parts of India, this district abounds in snakes, scorpions and lizards. The deep fissures that mark the cracking of the black soil in the summer season offer a welcome home for the big variety of scorpions, as also the beds of unfrequented boulders and stones. The cobra, as everywhere else, is a terror. The other poisonous variety of snake is the Russel's viper which is also found all over the district. Small water snakes inhabit the sparse patches of water. A peculiar variety of snake with heads at both ends called *Mannumukka-havu* is also found. Among the game birds, partridge and quail may be seen near the tanks in the winter time. Along the rivers and streams may be seen the wild duck, teal and water fowl.

The more important among the domesticated animals are the buffalo, the cow, the sheep, the goat and the donkey. A large number of the cattle belong to the Khillar breed. Considering the aridness of the area, the milk-yield of the cattle is fairly heavy. There is a fairly large population of horses and ponies of an indeterminate breed. The poultry consists mostly of the country variety though the poultry wing of the Animal Husbandry Department in the district has been doing active propaganda for the propagation of improved breeds like the White Leghorn and the Rhode Island Red.

Climate

The climate of the district is characterised by dryness for the major part of the year and a very hot summer. The low and highly variable rainfall renders the district liable to drought. The year may be divided broadly into four seasons. The hot season begins by about the middle of February and extends to the end of May. The south-west monsoon season is from June

to end of September. October and November are the post-monsoon or retreating monsoon months and the period from December to the middle of February is the cold season.

Rainfall

The district has only two raingauge stations with data extending to about 80 years. Rainfall data for a few years only are available for 11 more stations in the district. The statement of rainfall of the two stations and for the district as a whole is given in table 1 at the end of this chapter, while tables 3 and 4 give the talukwise monthly rainfall for the years 1962 and 1968, respectively. The average annual rainfall in the district is 601.6 mm. (23.68"). The region around Lingsugur gets the least amount of rainfall in the district while towards the south as well as the east, rainfall increases. During the south-west monsoon months, viz., June to September, the district receives about 71 per cent of the annual rainfall, September being the month with the highest rainfall. In the post-monsoon months of October and November also, the district receives some rain. The variations in the annual rainfall from year to year are large as is the case in the neighbouring districts. During the fifty-year period from 1901 to 1950, the district experienced the highest rainfall amounting to 207 per cent of the normal in 1916; 1941 was the year with the lowest annual rainfall in the same fifty-year period which was only 52 per cent of the normal. In 12 of the fifty years, the rainfall in the district was less than 80 per cent of the normal. Considering the district as a whole, there were three occasions when two consecutive years had rainfall less than 80 per cent of the normal. Even three such consecutive years have occurred at Raichur and Lingsugur. It will be seen from table 2 that in 43 out of 50 years, the rainfall in the district was between 400 and 900 mm. (15.75" and 35.43").

On an average, there are 41 rainy days (*i.e.*, days with 2.5 mm—10 cents—or more of rain) in a year in the district. As in the case of the amount of rainfall, this number is least at Lingsugur and higher at Raichur.

The highest rainfall in 24 hours recorded in the district was 158.7 mm (6.25") at Raichur on 31st October 1916.

Temperature

The only meteorological observatory in the district is at Raichur. The data of this observatory may be taken as representative of the conditions in the district. December is the coldest month with the mean daily maximum temperature at 29.3°C (84.8°F) and the mean daily minimum at 17.7°C (63.9°F). The nights are generally cool in the season, but day temperatures sometimes reach 35° to 38°C. The period from about the middle of February to May is one of continuous rise in

temperatures. May is the hottest month, the mean daily maximum temperature being 39.8°C (103.7°F). The heat is oppressive till the onset of the south-west monsoon by about the first week of June. Thereafter the weather becomes slightly cooler and continues to be so till the end of the south-west monsoon season. Day temperatures show a slight increase in October. From November, both day and night temperatures gradually decrease till December.

The highest maximum temperature ever recorded at Raichur was 45.6°C (114.1°F) on 23rd May 1928 and the lowest minimum was 10.0°C (50.0°F) on 14th January 1899 and 13th December 1945.

Humidity

The district on the whole has a dry climate, the period from November to May being the driest part of the year. Even during the south-west monsoon period, the humidities are not very high.

Cloudiness

Skies are moderately to heavily clouded in the south-west monsoon months. In the post-monsoon months, clouding is somewhat less. Clear or lightly clouded skies are common in the rest of the year.

Winds

During the south-west monsoon season, winds are stronger than in the rest of the year when westerly to south-westerly winds prevail. In the post-monsoon and the cold seasons, winds are light and wind directions variable in the mornings, but in the afternoons, the winds strengthen and blow from directions between north-east and south-east. In March and April, winds are as in the cold season. In May, the winds are stronger than in March and April and blow from directions between south-west and north-west in the mornings while in the afternoons the directions of the winds are variable.

Special weather phenomena

Being well inland, the district is seldom affected by full-fledged cyclonic storms. In the post-monsoon months, some of the depressions from the Bay of Bengal, after becoming diffuse on crossing the eastern coast of India, pass westwards across the district or its neighbourhood. In association with such diffuse depressions, strong winds and widespread rain occur in the district. Thunderstorms are frequent in the period from March to June and in September and October. Dust-raising winds and occasional dust-storms occur in April and May. Hail is rather rare.

Tables 5, 6 and 7 give the temperature and humidity, mean wind speed and special weather phenomena, respectively, as recorded at the meteorological observatory at Raichur.

TABLE I

Normals and extremes of rainfall in Raichur district

Station	No. of years of data		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.
1	2		3	4	5	6	7	8	9	10	11
Raichur	50	a	3 1	7 1	4.1	15.0	26.4	96.8	117 9	117.9	154.9
		b	0 2	0 5	0.5	1 3	2.4	6.6	8.8	8.0	8.9
Lingsugur .. .	31	a	2.3	1.3	5.3	18.8	39 1	64 0	66.0	99.8	131.8
		b	0.2	0 2	0.5	1 6	3.3	5.3	6.0	6.4	7.4
Raichur District		a	2.7	4.2	4 7	16.9	32.7	80.4	91.9	108.9	143.3
		b	0.2	0 3	0.5	1.5	2.9	5 9	7.4	7.2	8.1

Table I (Contd.)

Station	No. of years of data		Oct.	Nov.	Dec.	Annual	Highest annual rainfall as % of normal and year**	Lowest annual rainfall as % of normal and year**	Heaviest rainfall in 24 hours*	
									Amount (mm).	Date
1	2		12	13	14	15	16	17	18	19
Raichur	50	a	84.1	31.7	3 3	661.3	188 (1916)	41 (1941)	158.7	1916 Oct. 31
		b	4.7	1 9	0 3	44.1				
Lingsugur	31	a	72 6	36 3	4.8	542.1	156 (1903)	43 (1905)	152.4	1882 Nov. 26
		b	5.0	2.0	0.4	38.3				
Raichur District		a	78 3	33 5	4.1	601.6	207 (1916)	52 (1941)		
		b	4.9	1 9	0 3	41.1				

(a) Normal rainfall in mm.
(b) Average number of rainy days (days with rain of 2.5 mm or more)

* Based on all available data upto 1956.
** Years given in brackets.

TABLE 2

Frequency of Annual Rainfall in Raichur district

(Data 1901–1950)

Range in mm.	*Number of years*
301–400	4
401–500	12
501–600	9
601–700	11
701–800	6
801–900	5
901–1000	2
1001–1100	0
1101–1200	0
1201–1300	1

TABLE 8

Statement showing the taluk-wise average monthly rainfall in Raichur district for the year 1962 (in millimetres)

Sl. No.	Name of taluk	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1.	Raichur ..	..	1.4	32.4	55.2	64.4	71.6	27.6	93.9	104.5	78.5	19.0	81.7	630.2
2.	Manvi .	..	.	..	96.6	50.3	77.4	27.6	105.5	156.8	45.0	2.9	42.0	604.1
3.	Sindhanur ..	..	12.2	..	32.5	15.3	39.8	86.0	213.9	84.3	83.1	90.2	89.7	747.0
4.	Gangavati ..	..	.	.	59.9	9.7	90.6	29.8	110.3	90.7	176.5	72.0	56.1	695.6
5.	Koppal .	..	..	..	50.8	19.1	48.2	77.5	78.2	178.4	103.3	..	68.6	624.1
6.	Yelburga ..	..	..	..	118.4	14.9	115.0	73.3	127.4	123.4	93.2	35.6	74.7	775.9
7.	Kushtagi .	.	..	..	48.5	30.6	72.2	67.5	82.5	133.3	78.7	45.7	84.6	643.6
8.	Lingsugur .	..	1.8	..	50.2	23.3	53.7	39.8	203.1	162.6	144.0	42.3	61.5	782.3
9.	Deodurg ..	..	..	..	45.8	12.6	88.8	62.1	167.3	167.7	34.5	23.2	75.7	667.7
10.	District Total ..	..	15.4	32.4	557.9	240.2	657.3	491.2	1182.1	1191.7	836.8	330.9	634.6	685.6

Source : District Statistical Office, Raichur.

TABLE 4

Statement showing the taluk-wise average monthly rainfall in Raichur district for the year 1968 (in millimetres)

Sl. No.	Name of taluk	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1.	Raichur ..	..	1.3	2.3	12.1	33.9	95.8	76.0	63.4	182.3	51.5	3.8	5.5	527.9
2.	Manvi ..	..	..	..	6.9	..	52.7	51.1	1.8	219.8	95.6	8.0	..	435.9
3.	Sindhanur ..	..	..	.	..	59.4	45.2	105.2	7.5	224.8	22.6	16.5	..	481.2
4.	Gangavati ..	..	1.7	..	8.3	42.2	104.3	95.4	2.5	130.7	127.9	35.7	..	548.7
5.	Koppal ..	..	..	..	62.7	95.3	28.5	55.7	6.1	238.2	72.6	35.3	..	594.4
6.	Yelburga ..	..	..	..	24.5	..	45.0	135.6	..	257.6	130.4	27.2	..	619.7
7.	Kushtagi ..	.	10.9	..	8.9	38.3	1.9	109.2	..	277.0	102.3	28.2	..	576.7
8.	Lingsugur ..	..	5.9	.	15.1	28.6	69.1	106.3	7.1	207.8	64.6	17.2	2.6	524.3
9.	Deodurg ..	..	10.9	.	59.2	.	73.4	243.6	15.3	207.6	91.7	27.5	..	729.2
10.	District Total ..	..	30.7	2.3	197.7	297.7	515.9	978.1	103.7	1945.2	759.2	199.4	8.1	559.7

Source: District Statistical Office, Raichur.

TABLE 5

Normals of Temperature and Relative Humidity (Raichur)

Month	*Mean daily maximum temperature*	*Mean daily minimum temperature*	*Highest maximum ever recorded*		*Lowest minimum ever recorded*		*Relative humidity*	
	°C	°C	°C	*Date*	°C	*Date*	0830* %	1730* %
January ..	30.4	18.2	35.6	1897 Jan. 30	10.0	1899 Jan. 14	64	33
February ..	33.3	20.2	38.3	1897 Feb. 21	12.8	1929 Feb. 1	54	29
March ..	36.9	23.3	42.8	1892 Mar. 26	16.7	1936 Mar. 6	47	29
April ..	39.1	26.1	43.3	1927 Apr. 29	16.1	1936 Apr. 1	51	33
May ..	39.8	26.2	45.6	1028 May 23	18.3	1927 May 4	57	34
June ..	35.2	23.0	43.3	1898 June 3	16.1	1896 Jun. 18	70	51
July ..	32.3	22.8	38.3	1915 July 9	17.8	1890 July 20	75	58
August ..	32.2	22.7	37.8	1015 Aug. 15	17.2	1908 Aug. 4	76	54
September ..	31.8	22.6	38.3	1897 Sep. 25	19.4	1948 Sep. 25	77	56
October ..	32.1	22.3	37.2	1920 Oct. 13	15.6	1943 Oct. 31	70	47
November ..	30.3	19.8	35.0	1920 Nov. 10	11.7	1924 Nov. 15	65	40
December ..	29.3	17.7	36.1	1899 Dec. 17	10.0	1945 Dec. 13	65	34
Annual .	33.6	22.1					64	41

*Hours I.S.T.

TABLE 6

Mean Wind Speed in Km/hr.

Raichur

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
8.9	8.9	9.0	9.8	13.5	17.2	16.9	16.3	12.2	9.2	8.9	8.7	11.6

TABLE 7

Special Weather Phenomena

Raichur

Mean No. of days with	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Thunder	0.4	0.4	1.5	2.1	2.4	2.5	0.3	0.4	2.8	2.0	0.0	0.0	14.8
Hail	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Dust-storm	0.0	0.0	0.0	0.5	0.6	0.1	0.8	[illegible]	0.0	0.0	0.1	0.0	2.4
Squall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Fog	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CHAPTER II

HISTORY

Legendary period

AT least, a portion of the Raichur district is directly associated with both the great epics, the Ramayana and the Mahabharata. For, the situation of Kishkindha of the epic period is generally acknowledged to be on the Tungabhadra, where, in modern times, have arisen the cities of Anegundi and Vijayanagara, of which the former is a part of the present Raichur district. The Brahmanical version of the Ramayana, as contained in Valmiki's poem, seems to depict the people of this region as *Vanaras* (*i.e.*, monkeys). But in the Jaina Ramayana, an old Kannada work, Kishkindha has rightly been called the *Vanara-dhvaja* kingdom or the kingdom of the monkey-flag. For, these were the people whose totem or the emblem on whose national standard was the monkey.

According to the Jaina Ramayana, it was one Srikantha Kumara, brother-in-law of Dhavala Kirti, who was a descendant of Puru, that founded the city of Kishkindha and was the progenitor of the line of kings of the monkey-flag. Though the two versions, Brahmanic and Jaina, of the Ramayana differ in the details of the story, both agree in stating that the first news Rama received that Ravana had carried off his wife Seeta to Lanka (identified with modern Ceylon) was conveyed to him when he was at the court of Sugreeva, the then king of Kishkindha, and that with the forces obtained here and with the help of Hanuman, he accomplished his expedition and the recovery of Seeta. He first met Sugreeva who had then been dispossessed of his kingdom, and assisted him in recovering his throne. As to the moral and ethical standards (including the ethics of war) of the people, the famous conversation between Rama and Wali, the elder brother of Sugreeva, whom Rama killed striking him in the back with an arrow and which act Wali rightly asks Rama to justify, is illuminating and has given rise to a controversy as to who should be praised in this connection, whether Rama or Wali.

The same story of the friendship of Kishkindha with the north, we read in the Mahabharata. When Yudhishthira performed the Rajasooya sacrifice, he sent out four expeditions.

one in each direction. The expedition to the south was commanded by Sahadeva. After various conquests, he crossed the Tungabhadra and encamped on the Kishkindha hill, where Sushena and Vrishasena, the then chiefs of the "monkey race", made friends with him; thence he went to the Kaveri.

Lastly, there is a professed grant by Janamejaya, the great-grand-son of Arjuna, at Tirthahalli in the Shimoga district, dated in the year 89 of the Yudhishthira era.[1] The grant is in Sanskrit and in Nagari characters, whereas the signature is in comparatively modern Kannada characters. Janamejaya is represented in it as ruling at Kishkindha, and making a gift in the presence of the idol of god Harihara of the place on the Tungabhadra in which his great-grand-father Yudhishthira had rested.

Prehistoric period

Situated between the rivers of the Tungabhadra and the Krishna, the fertile Raichur doab has been the abode of man since very early times. The district abounds in prehistoric remains, representing all the stages of prehistoric culture. The prehistoric antiquity of this district was first brought to light by Col. Meadows Taylor in the Journal of the Bombay Branch of Royal Asiatic Society, Vol. IV, 1835, in which he dealt with the megalithic tombs of the district and referred to the report by Rev. G. Keis on the groups of dolmens in the Benkal forest. Between 1870 and 1880 Mr. Bruce Foote of the Indian Geological Survey, who was the pioneer of research on the stone-age in India, in the course of his geological studies in the Raichur district, found a number of neolithic sites and collected artifacts which were later purchased by the Madras Government and deposited in 1904 in the prehistoric section of the Madras Museum. These sites were later visited by Capt. Leonard Munn, Special Officer of H.E.H. the Nizam's Geological Survey, and were described by him in the Journal of the Hyderabad Geological Survey, Vol. II, Part I, 1934. During the months of December 1935 and January 1936, Mr. Yazdani, the then Director of Archaeology in Hyderabad, also made a survey of this area.

The following is the list of prehistoric settlements in this area:—

Name of site	*Name of taluk*
Alisindhi hill	Deodurg
Benkal	,,
Kerehal	Gangavati
Aidanhal	Lingsugur
Anahosur	,,
Bhillamrayanagudda	,,
Gaudur	,,
Honhalli	,,

Name of site			*Name of taluk*
Kadkal	..	..	Lingsugur
Machnur	..	..	,,
Matbal	..	..	,,
Maski	..	..	,,
Totegal	..	..	,,
Venkatapur	..	..	,,
Wandalli	..	..	,,
Yergunti	..	..	,,
Anandgal	..	..	Manvi
Halapur	..	..	,,
Kallur	..	..	,,
Kotegal	..	..	,,
Kavital	..	..	,,
Nawalkal	..	..	,,
Sirvar	..	..	,,
Watgal	..	..	,,
Agoli	..	..	Sindhanur
Gobbarkal	..	..	,,
Rodalkonda	..	..	,,
Chikkahesarur	..	..	,,
Kurkundi	..	..	,,
Putkanadoddi	..	..	,,
Salgunda	..	..	,,

Of these sites, Maski is by far the most important, because it has afforded as many as seventeen interesting spots. The importance of the place was possibly due, in a way, to gold-mining in its neighbourhood even in those ancient days. Maski, which is more widely known for its Ashokan Edict of the third century B.C., has a long chain of granite hills, which have several extensive flat surfaces on the top, one fairly big natural reservoir of water and innumerable natural caves, which offered shelter from the sun and the rains and protection from wild beasts to the early man. In addition to these facilities for primitive life, there flows nearby a perennial stream called the Maski river. Each one of the seventeen sites excavated here has yielded fruitful results. Everywhere neolithic implements like stone-axes and hammers, chalcedony, chert-flakes and cores were discovered in large numbers. In the western slopes of the hills is situated the cave bearing the Ashokan Edict and as we go higher up the hill from this side, we find a succession of caves. Many of these have yielded chert-cores and flakes, besides beads and plain pottery. All around the foot of the hills are found traces of early smelting. At two places, iron slag was discovered in great quantity and at each of those places furnaces and grinding stones were discovered. At this place has also been discovered a big field of Menhirs arranged in avenues, to the south-west of the hills. (This pre-historic importance might have been a reason for selecting Maski as a spot for inscribing Ashoka's Edict).

The above description of Maski applies more or less to other places as well. The material discovered at these sites may be conveniently classified into stone-implements, beads, pottery, terra-cotta figurines, smelting factories, megalithic tombs and prehistoric paintings. Here is a general survey of these objects:

one Imple-ents

Different kinds of stone implements have been found many of which bear a striking resemblance with La Micoque and Taubach, St. Acheul and Chelles. At least three different types, representing the different stages in the development of the art of celt-making, can be recognised among these implements. Those belonging to the earliest type have rough surfaces and rough ends. Those belonging to the middle stage have sharp polished edge and the last type has a smooth surface and a sharp and polished edge. Majority of the flakes are chert stones of a variety of colours. But a considerable number of them is of fine chalcedony of different shades. In some cases, the flakes have distinctly three ribs, being clear signs of secondary workings. One small piece of chalcedony has been turned into a beautiful small saw by extremely careful secondary flaking. Besides, a small number of white quartz flakes have also been discovered.

ads

A great quantity of stone beads of various shapes such as barrel-shaped, bipyramidal, globular, discoid and triangular, has been discovered. They consist of beads of chalcedony, carnelian, amethyst, shell, lapis lazuli, crystal, onyx, agate, etc. Of these materials, except lapis lazuli, all are found in the Deccan. These have been pierced, obviously for being placed in a string, and have been finely shaped and polished. According to experts, they have got a striking resemblance with pre-dynastic Egyptian beads exhibited in the British Museum. Some of the carnelian beads have been covered with a kind of white paint, while others, just like some of the Mohenjo-Daro beads, bear painted design in white. Maski has been considered to have been once an important centre of bead industry.

ttery

The pottery discovered on the hills is usually of the plain type. But that found near the smelting factories seems to be of a more advanced character. In a majority of cases, the pottery is highly glazed and bears incised and embossed designs. Among these, two pieces, each bearing an elephant in relief, are of great interest. Pieces of pottery with red, green and white colours and depicting scrolls and geometric designs have been collected in great numbers. Near the smelting factories have also been discovered some very large pots, which are in some cases as thick as three inches.

'ra-cotta irines

Some good pieces of terra-cotta have been collected in this region. At least, a few of them show a developed taste and art. Among the terra-cotta articles found at Maski, there are human

and animal figurines, beads, discs with grooves and wheels of toy-carts. The human figurines belong to different periods. A primitive figure representing a woman with long trunk and short legs bears striking resemblance to similar figurines found in the Mediterranean counrties, particularly Malta. But some human figures show fine modelling and ornamental work. These may be of a later period, belonging to the fourth or third century B.C. Among these things, there is also a representation of a horse which is very crudely made, and it appears that the horse was not a familiar animal to the potters of those days.[2]

Smelting factories

Smelting factories were found at a majority of these neolithic sites. As a rule, wherever signs of early smelting were found, they were accompanied by a discovery of microliths, indicating the presence of a mesolithic stage closely associated with metal industry. At many of these places there have been found huge ash-mounds, which must have been the result of large-scale manufacture of the metal. Wherever there is an ash-mound, there are to be found huge mullackers, pounders, pestles and smelting stones in numbers. The ash-mounds are situated in areas which are either highly auriferous or rich in iron or copper ores, indicating thereby their connection with the working out of these metals. Even now slag can be picked up in considerable quantities round about these mounds. Of the mounds found in this region, the most important are those of Gaudur, Machnur, Yergunti, Wandalli and Kavital. At Maski, in the horse-shoe shaped valley, two furnaces have been excavated. At one place, we can see an opening where the mouth of the blowpipe can be fixed.

Megalithic tombs

The area comprising the entire former Hyderabad State may be said to be rich in megalithic tombs, which have been surveyed and accounts thereof have been found from time to time published either in the Archaeological Reports or in the Journal of the Hyderabad Archaeological Society. Raichur district has afforded examples representing all types of megalithic tombs. At Agoli and Benkal dolmens were found which were perfectly intact.

Of all the groups of megaliths found in the district, that found at Benkal is of particularly exciting interest. It is situated in a thick forest on the higher levels of a hill. Closely to the east of the dolmens is a natural tank. Each dolmen originally consisted of six slabs; four for the four sides and one each for the top and the bottom. No mortar has been used, but each slab is so arranged as to act as support for the other. Cubic in form, the dolmens vary in size, some of them measuring about nine feet every way. The slabs, about six inches in thickness, appear to have been obtained by splitting rocks with the help of fire. Usually, there is a circular or semi-circular hole in one of the side-slabs, the

purpose of which it is difficult to ascertain, there being nothing in the dolmens which are found intact. The dolmens stand on rocks and the remains of the dead, along with a few pieces of pottery are found deposited beneath the bottom slab. On the lower slopes are to be found a few chromlechs.

At Lingsugur and Mudgal, there are some stone-circles containing the remains of some prehistoric persons. At Maski, as has already been stated, a vast field of menhirs arranged in avenues has been discovered.

Prehistoric paintings

At Benkal, close to the dolmens, there are prehistoric paintings in three places. At two places the paintings are under rock-shelters. The subject of one of these is a hunting scene. Though, due to the effect of weather, the paint has faded away at some places, some of the riders and their horses and some groups of men can be distinctly seen. The tails of the horses remind us of the tails of some animals on the Mohenjo-Daro seals. One of the men has in his hand an axe, the blade of which resembles that of a metal axe. Much of the other drawing, which has been incised in outline on a surface measuring about thirty feet by thirty feet and painted with red ochre, is unintelligible. But at least two human figures and some animal figures representing an elephant, cow, horse and deer can be clearly made out. One of the human figures appears to be greatly alarmed, being placed in the midst of wild animals. No date has been assigned to these drawings. The mode of treatment of the terrified man and of some of the animals, however, exhibits a developed taste and art. The third object, which is to the south-east of the second, is painted on the ceiling of a natural cave and consists only of one human figure.

Two other sets of prehistoric drawings have been found at Yemmigudda or buffalo-hill, near Kallur. On one of the eastern boulders of this hill, at a height of fifty feet from ground-level, figures of two buffaloes have been engraved. Both the animals face south and each of them covers a space of about four feet square. The outline, about one inch broad, has been incised a quarter inch deep. This boulder is at once inaccessible and safe from vandalism, but due to these very reasons its position must have rendered the work extremely difficult without the help of an artificial scaffolding. It is these drawings that have given the hill its name 'Yemmigudda'. To the north of this boulder is another on which there are two bulls engraved; but they are not visible from the foot of the hill. Both animals face the north and the front one is being driven by a man with a long stick in his hand. The figure of the man is about a foot in height and that of the bull about nine inches. The other bull measures about a foot and a half, the humps of both the bulls being very marked. The man and the bulls are well drawn.

Some ancient drawings have been found on a hill called 'Togalagudda', a deserted settlement of ancient metallurgists, situated to the north-east of Etnoor, a village 18 miles from Raichur on the road to Lingsugur. It is a small hill containing a large number of caves and ample evidence in the form of ashes, pottery, slag, crushed quartzite, pounders and potsherds to show that it was a metallurgical site for a long time. The drawings have been made in red ochre on a boulder, on the top of the hill, in a space of about eight feet by four feet. Though generally the drawings have suffered much from the actions of the weather, some portions of them are still quite distinct, particularly the central portion depicting a deer being attacked with a spear, which is quite intelligible and is full of life. To the north of this boulder is another, having the drawing of a crocodile or a lizard on it painted in red. To further north at two places there are the remains of other drawings in red ochre, which have become too indistinct for identification.

Recently, some paintings of human beings wearing animal skins, horse-riders, groups of dancing men, antelopes, bulls, tigers and peacocks were discovered in rock-shelters in the hills of Hire-Benakal area ("Indian Archaeology. A Review", 1967-68, pp. 67-68).

Metallurgy

Metallurgy seems to be a strikingly dominating feature of the prehistoric sites in this district. Traces of mining and metallurgy have been unearthed at various places. Here is the description of a typical site of this type, appearing in the Annual Reports of the Archaeological Department of H.E.H. the Nizam's Dominions for the years 1937-40. The site is that of Yemmigudda near Kallur in Manvi taluk. "The cave was thoroughly examined and signs of old habitations were discovered in it. In a corner were found a few broken pieces of pottery and extremely soft earth mixed with ashes and broken pieces of crucibles. Coming out of the cave and going further up we reach a flat area which is rather uneven. In the north-eastern corner is a ring about 20 feet in diameter full of sand and ashes and pieces of slag; crushed quartzites and mealing stones were found by its side............Climbing the highest point of the hill we reach a level ground about 50 feet by 50 feet which also contains traces of an ancient metallurgical site........ Pieces of quartzite iron and iron slag were discovered here in great abundance...... To the south-west of this at a distance of a few feet is a queer rough stone about 4 feet by 4 feet which has assumed the shape of a big saucer as ores had been crushed and pounded on it for a long itme. Traces of copper oxide were very prominent on this stone........ To the south of this hill is a vast area containing traces of ancient metallurgy and prehistoric antiquities. Trial excavations were conducted at this site and it proved to be very fruitful". There is abundant evidence for the manufacture of

gold, copper and iron in those days, though it is difficult to say which metal was known earlier in South India—copper or iron. Some authors have opined that copper was known earlier than iron.[3]

Prehistoric Raichur

Till recently, it was held by scholars that a distinct chalcolithic period prevailed in northern India, particularly in Sind and the Punjab and that in the south, the neolithic stage passed directly into the iron-using stage, without the intervention of a copper stage.[4] But the evidence from some of the above-mentioned sites renders it necessary to recognize a stage of culture when copper was also being used. The most important site from this point of view is Kallur,[5] where not only a prehistoric furnace, but also a broken piece of copper axe, a lump of copper pyrites and a lump of iron ore, all within a radius of five feet from the furnace, have been found. Recent research has exposed some copper finds in southern India; but before the discovery of the Kallur site, they were never found closely associated with stone-age implements. 'The close association of a broken piece of copper axe and other articles of copper in close association with late stone-age antiquities opens a new chapter in the field of prehistoric study'.

Another important inference that can be drawn from the above observations is regarding the trade connections of the Dekkan with the prehistoric civilization of the Indus valley. We know that the Indus valley people were familiar with gold, silver, copper, tin and lead, though the sources of these metals are uncertain. As for gold, some scholars have opined that it is likely to have come from the Dekkan, 'since from early historic times it has always been the south of the Peninsula that has supplied the bulk of India's gold.........' This conjecture seems to get support from the traces of gold-smelting found in numerous neolithic sites in the Raichur district, some of which may be as old as the third or second millennium B.C.

Early History

Mauryas

The greater portion of the Dekkan seems to have been brought under the sway of the Mauryas even before the reign of Ashoka the Great. According to some scholars, this was the position even during the period of the Nandas, the predecessors of the Mauryas. According to Puranic accounts, the Nandas conquered all the rival monarchs and became the sole emperors of the whole of India. How far their sway extended into the south is, however, not so easy to determine. That there were trade and political contacts between the north and the south in those days is amply evidenced among other things by the discovery of punch-marked *purana* coins in North India as well as in the Dekkan, South India and Ceylon. This, however, cannot help us in fixing the southern limit of the Nanda empire. But the

one thing we are certain of is that the region of Kuntala[6] formed a part of the Mauryan empire at the time of Ashoka; at the same time, there is no evidence of the Mauryan emperors having undertaken wars of conquest in the south. It is, therefore, reasonable to suppose that Kuntala had already been included in the Nanda empire and the same boundaries continued in the Mauryan regime.

The Arthashastra of Kautilya (Chanakya) gives valuable information about the increasing trade between the north and the south in the age of the early Mauryan empire. 'Among land routes' says Kautilya, 'my teacher considers that leading to the Himalaya superior to the one leading to Dakshinapatha, because of the elephants, horses, spices, ivory, hides, silver and gold articles, all very valuable'. He then gives his own view that 'although it is deficient in woollen cloth, hides and horses, the Dakshinapatha abounds in conch-shells, diamonds, precious stones of other kinds, pearls, and articles of gold. Moreover the southern trade route across Dakshinapatha traverses a territory rich in mines and valuable merchandise, is frequented by many (traders) and easy to travel by. That is the superior route'. The mention of conch-shell and gold articles is particularly to be noted. It is quite possible that a part of the supply of these products came from the Raichur region.

As for Ashoka, there is some definite evidence to determine the southern boundaries of his empire. The kingdoms of South India, together with Ceylon, of those days are mentioned in his second and thirteenth rock-edicts. The list in the second edict, which is more complete, includes the names of Chola, Pandya, Satiyaputa, Keralaputa and Tambapanni (Ceylon). All these kingdoms are clearly stated to have been outside his empire. South India minus these regions would be more or less equivalent to what is known as the Dekkan. Edicts of Ashoka have been found in this latter region, Dekkan. In the Raichur district, they have been discovered at three places. At Maski, in the Lingsugur taluk, has been found a minor edict of the southern version and at Gavimath and Palkigundu, two hills to the east and west of Koppal, have been found two edicts, also minor, of one and the same version, the northern. Of these, the Maski inscription is the most important and it is interesting amongst all the Ashokan edicts in that while in all other edicts but one, Ashoka has been referred to only as Devanampiya and Piyadasi, in this he is also referred to by his personal name. That Buddhism was the prevalent religion in this region in those days is evidenced not only by these edicts but also by the Buddhist relics and remains found all over the Dekkan. It is said that Ashoka sent missionaries to preach Dhamma (Dharma) not only to the different parts of his own empire, but also to the countries lying outside his own territories.

The Dekkan was an important part of the Mauryan empire and contained the seats of two viceroyalties—one at Tosali (Dhauli) in Kalinga and the other at Suvarnagiri further south in the heart of the Dekkan. Many scholars are of the opinion that the headquarters of the southern viceroyalty of the Mauryas was situated somewhere in the Raichur district, since the existence of gold mines in this region and a little further south strongly suggest the identification of this region with one of the famous viceroyalties of the Mauryan empire. But there is difference of opinion about its exact identification. Some identify it with modern Kanakgiri and others with modern Maski.

Satavahanas

After the death of Ashoka, his empire fell to pieces. His northern possessions were divided between a son and two grandsons of his and the people of Dekkan region were left to themselves. In the Dekkan, the Andhras were the most powerful. Satavahana, who belonged to one of the numerous families of this tribe, proclaimed his independence, carved out a small principality for himself and began to rule over it.

There has been a good deal of controversy about the original home of the Satavahanas. The Bellary district, Maharashtra and Vidarbha have alternatively been suggested as the original home of this family.[7] While the modern Bellary region,[8] known during the latter part of the Satavahana period as the 'Satavahanihara' or the Satavahana province, has been taken by different scholars as the original home of the Satavahanas, some hold the view that this region did not even form part of the Satavahana kingdom, even during the reign of the powerful later Satavahana king Gautamiputra Satakarni (c.A.D. 106-130). According to the latter group, the Satavahana empire under Gautamiputra Satakarni did not extend beyond the Krishna in the south and the southern districts were annexed to the empire only about the middle of the second century A.D. They base their arguments on two facts, namely, that the records of the early members of the family have been found at Nasik and Nanaghat (a pass leading from the Konkan to Junnar in the Poona district) and that the Hathigumpha inscription of Kharavela places the kingdom of the Satavahanas to the west and not to the south of Kalinga (the coastal country comprising mainly the Puri and Ganjam districts).

But these arguments are not strong enough to defend the theory. It is quite possible that the family had its humble origins in the south (in the Bellary district) and then gradually extended its territories to the north, finally to have its capital at Pratisthana (modern Paithan). We have a parallel instance in the case of the later family of the Yadavas of Devagiri who had their earlier capitals in the Bijapur district. Otherwise, there seems to be no reason why only the Bellary region should have been

called 'Satavahanihara' when the Satavahanas had a vast empire to their credit.

There is also difference of opinion as regards the problem of Satavahana chronology. But without entering the controversy, it may be taken for granted that the Satavahana rule began in 230 B.C., *i.e.*, immediately following the decay of Ashoka's empire, and continued upto A.D. 220 or a few years later. There were 31 rulers in the Satavahana family. While many of these were insignificant, the remaining few were really powerful kings. These kings may be conveniently divided into three groups—early, middle, and later. In the first group, Simuka, Satakarni I and Satakarni II were great kings. In the second group Kuntala, Pulumavi I and Hala, and in the third Gautamiputra and Yajnasri were important.

Satavahana, the founder of the dynasty, was succeeded by Simuka (220 B.C.) who invaded Maharashtra and conquered it. He established his rule over this region and consolidated his position through a matrimonial alliance with the leader of the Rashtrikas. Simuka was succeeded by his brother Kanha (207-189 B.C.), who, in turn, was succeeded by Satakarni I. This ruler had to face a trying situation. In addition to the danger from the north, there arose a powerful chieftain named Kharavela in Kalinga. Satakarni occupied Malva and performed an Ashvamedha as a token of his triumph. He then successfully repelled the repeated attacks of Kharavela and performed another Ashvamedha. He then extended his conquests to the east coast, south of Kalinga, performed the Rajasuya sacrifice and assumed the title Dakshinapathapati or Lord of the Dekkan. The next important ruler of the family was Satakarni II, who came to the throne about 172 B.C. A great conqueror, Satakarni II annexed to his kingdom Vidarbha, a part of Vidisha in Central India and later Kalinga. The ruler of Pataliputra invaded the Satavahana kingdom, but was defeated and killed by Satakarni. After this king, there was a temporary decline in the Satavahana power, which was revived by Kuntala after the lapse of about half a century. Kuntala made extensive conquests and became the overlord of many rulers in the north. The next king Pulumavi, who was also a valiant ruler, exterminated the Kanva family and annexed Magadha to the Satavahana empire. Hala (c.A.D. 20-24) was another illustrious king. But the kings coming after him were weaklings and could not maintain their hold on the vast empire. The Kushans, who were already well-established in the Punjab, made repeated inroads into the Ganga basin and shattered the Satavahana power there. The Satavahanas thus lost their trans-Vindhyan possessions and came to be confined once again to the original territories in the central and eastern Dekkan. The last great Satavahana king was Yajnasri (c.A.D. 170-199),

who re-conquered almost all the former territories of the Satavahana empire. The great empire finally fell about A.D. 200, the ruling family itself becoming extinct.

Post-Satavahana period

After the downfall of the Satavahana family, the empire was split up again into a number of small principalities, the Abhiras and the Traikutas, the Rashtrikas, the Chutus and the Nagas, the Pallavas, the Ikshvakus and the Vakatakas becoming powerful in the north-western, western, southern, south-eastern, eastern and central portions respectively. These petty kingdoms flourished till the middle of the sixth century A.D., when the Chalukyas established a strong kingdom, which ultimately absorbed many of them. This intervening period, having no single ruling family wielding power over a portion of the Dekkan, has, for the sake of convenience, been designated as the post-Satavahana period. What was the exact position of the Raichur region during this period cannot be said with any degree of certainty.

In all probability, this region was held by the Vakatakas during the major part of this period. The Vakatakas, who rose to power in the regions to the south of the Vindhyas, are said to have owned extensive territories in the Dekkan and penetrated southwards into the Kuntaladesha.[9] They are even said to have occupied parts of Bellary district and the region to the south of it in the present Mysore State.[10] The founder of this dynasty, according to the Puranas, was Vindhyashakti and its early capital Purika in Berar. His son and successor was Pravarasena (c.A.D. 280-340), who conquered Malva and made Vidisha his secondary capital. The next two rulers were Rudrasena (c. 340-365) and Prithvisena (c. 365–390) and it was during this period that Kuntala was conquered by the Vakatakas and annexed to their kingdom. During the latter part of the fifth century A.D., the Vakataka power was on the decline and its final fall occurred somewhere between A.D. 515 and 550.

A portion of the Raichur district seems to have been held during parts of this period by the Chutus also. Very little is known about these kings who are said to have ruled in Maharashtra and Kuntala.[11] The names of some kings of this line are known from the coins found in the North Kanara and Chitradurga districts. Lead coins with the horse device and inscribed with the name Hariti (a part of the name of the Chutus) have also been discovered in the Anantapur and Cuddapah districts in Andhra Pradesh. Chutus have often been considered as a branch of the Satavahanas.

Chalukyas of Badami

After the Satavahanas, the Chalukyas of Badami were the major dynasty of the Dekkan, who made an attempt to unify the Dekkan and succeeded to a great extent during the time of their ruler Pulikeshi II. The origin of the Chalukyas is not definitely

known. Leaving out of account the myths and legends about their origin, the current view seems to be that the Chalukyas were a local family. Thus N. Lakshminarayana Rao says that there are reasons to believe that the Chalukyas were natives of Karnataka.[12] An inscription on a stone tablet in the temple of Meguti at Aihole, in the Bijapur district, besides tracing the history of the Chalukyas, throws much light on the political conditions of the country at the time of the early Chalukyas. The inscription is of the time of Pulikeshi II and is dated A.D. 634-35 (Saka 556).

Though the earliest authentic names in the Chalukya family are those of Jayasimha and Ranaraga, the first noteworthy ruler in this family was Pulikeshi I (c. 535-566), son of Ranaraga. An inscription dated A.D. 543 at Badami in Bijapur district states that Pulikeshi I fortified it and presumably made it his capital. Pulikeshi I was succeeded by his son Kirtivarma I (566 to 597–98 A.D.). According to the Aihole inscription, Kirtivarma was a 'night of destruction' to the Nalas, Mauryas and Kadambas. An inscription of his younger brother Mangalisha in the cave III at Badami states that the work of construction of the cave-temple began during Kirtivarma's reign. Kirtivarma, who left behind him a minor son named Pulikeshi, was succeeded by his brother Mangalisha. Mangalisha expanded the Chalukyan kingdom considerably in the north and the west. Later on, he began to intrigue for the exclusion of his nephew Pulikeshi and for passing on the throne to his own son and this resulted in a regular open conflict, in the course of which Mangalisha lost his life. Pulikeshi II (610-642) succeeded him and ascended the throne of his father in 610. Pulikeshi II was undoubtedly the most powerful and illustrious ruler of his dynasty. He came out successfully from the chaos and confusion which had resulted from the civil war between himself and his uncle. After putting down the internal troubles, Pulikeshi led a number of campaigns against the neighbouring powers in all directions. He overthrew the Kadambas, the Gangas, the Alupas, the Pallavas, the Cholas, the Keralas and the Pandyas in the south, the Mauryas of the Konkan, the Latas, the Malavas and Gurjaras in the north and the Kosalas and the Kalingas in the east. His greatest victory, however, was the one he had over Harshavardhana of Kanauj, by defeating whom Pulikeshi II gained the title Parameshvara or Supreme Lord. As a result of all these conquests, Pulikeshi became the master of three Maharashtrakas (*i.e.*, great kingdoms), comprising 99,000 villages. This vast empire he ruled with great ability and skill. His reputation spread far and wide and Khusru II, the king of Persia, is said to have interchanged presents and letters with him. Hiuen Tsang, the famous Chinese pilgrim who visited the court of this monarch and travelled over his dominion, has paid glowing tributes to the efficiency of the king as an administrator and to his great might as a ruler. Towards the close of Pulikeshi

II's reign, a great calamity overtook the Chalukyan kingdom. About A.D. 642, Pulikeshi II was defeated and probably killed by the then Pallava ruler Narasimha-varman I, whose father had been defeated by Pulikeshi II and who. in retaliation, led an expedition against Badami and captured it.

Pulikeshi II was succeeded by his eldest son Vikramaditya I (655-681). The young prince had to fight hard with many enemies in order to establish himself on his ancestral throne. For, the sudden and tragic death of Pulikeshi II had let loose the elements of disorder in the kingdom, including even two of Pulikeshi's own sons. But Vikramaditya proved equal to the occasion. In about 681, Vikramaditya I was succeeded by his son Vinayaditya. In several of his records, Vinayaditya is stated to have arrested the exalted power of the Pallavas and defeated the Kalabhras, the Cholas and the Pandyas in the south and the Haihayas and the Malavas in the north. Later records credit him with having levied tributes from the powerful rulers of Kavera, Parasika and Simhala. He is also said to have conquered the lord of the entire Uttarapatha, whose name, however, is not specified. Vinayaditya thus seems to have fully restored the old power and prestige of the family. The next ruler, Vijayaditya (697-733) conquered Kanchi and levied a tribute from the Pallava king. An inscription referring to the reign of this king has been found at Halageri in the Koppal taluk.13 The inscription being incomplete, its exact date and details cannot be made out. It mentions Kopana (modern Koppal), which is the earliest allusion to the place so far known. Vijayaditya was succeeded by Vikramaditya II (733-34 to 744-45), his eldest son. This king is said to have made a sudden attack on the Pallava country and put to flight the Pallava king Nandipota-varman. He is also said to have donated heaps of gold to the Rajasimheshvara and other temples at Kanchi. Vikramaditya II was succeeded by Kirtivarma II (744-45 to 757), who was the last king of this famous house of Badami. He was a weakling and could not maintain hold over the vast Chalukyan kingdom. Many of the feudatory rulers became bold and restive. Dantidurga, the feudatory of the Rashtrakuta family, who was steadily undermining the Chalukyan power, made the final assault on Kirtivarma II in 752 or 753. He took possession of Maharashtra and Kirtivarma became restricted to the southern districts of his kingdom. After continuing to rule for three or four years more, he was finally overthrown by the Rashtrakuta king Krishna I in 757.

Rashtrakutas of Malkhed

The Rashtrakutas, who patronised Kannada poets and used the Kannada language and script in their inscriptions, were undoubtedly of Kannada origin, as has been proved beyond doubt by Dr. Altekar.14 Said to have been the descendants of the Rathikas, a tribe which inhabited Western Dekkan since the times of Ashoka, the Rashtrakutas flourished during the sixth and the

seventh centuries A.D. as feudatories of the Chalukyas of Badami. Their regular history begins with their elevation to sovereignty under Dantidurga in 753. Defeating the Chalukyan king Kirtivarma II in that year, he took possession of the districts of Poona, Satara and Kolhapur. In this task, he was assisted by the Pallava king, the traditional enemy of the Chalukyas. Dantidurga died childless and was succeeded by his uncle Krishna I (756-775). This king had an eventful reign. He attacked the Chalukyan king once again, defeated him completely and annexed his territories to the Rashtrakuta kingdom. Beyond still in the south, he attacked the Ganga king and occupied his capital and made him his feudatory. Two years later, the Chalukyas of Vengi were also defeated and their territories were annexed to the Rashtrakuta kingdom. As a result, the territory covering the whole of the erstwhile modern Hyderabad State was also incorporated in the Rashtrakuta empire. Krishna I was succeeded by Govinda II (775-780), who devoted himself to a life of pleasure. He was soon deposed by his younger brother Dhruva who was looking after the administration in his reign. Dhruva, who reigned from 780 to 792, first of all punished the allies of Govinda II. He defeated the Ganga king in the south and put his own son Stambha in his position Further, he proceeded against the Pallava king who, however, conciliated him with gifts. After the death of this king, there was again a war of succession between Stambha, the eldest son, and Govinda III, the powerful. Ultimately, Govinda won and ascended the Rashtrakuta throne. He reigned from 792 to 814.

Govinda III was a powerful king and fought many successful battles. In the south, he captured and imprisoned the Ganga prince Shivamara and overran Nolambavadi, whose rulers the Nolambas, were the feudatories of the Pallavas. He also attacked the Vengi kingdom and had a few victories. In 802, he successfully attacked and defeated the confederacy of the Gangas, Pallavas, Pandyas and Keralas. Govinda III was succeeded by Nripatunga Amoghavarsha I (814-880), who was then a boy of six years. His uncle Karka acted as the regent. The succession of a boy king prompted several of the feudatories to rebel. But all the internal disorders were ably put down by Karka. Amoghavarsha was a great lover of learning. He is reputed to be the author of the famous Kannada work *Kavirajamarga*. He greatly developed Manyakheta (Malkhed), the capital city. An incomplete inscription referring to the reign of this king has been discovered at Koppal.[15] Dated about 850, this is probably a part of a hero-stone. The next king was Amoghavarsha's son Krishna II (880-915). This ruler had to face vigorous attacks of Gunaga Vijayaditya of Vengi. Krishna and his ally, Sankila of Chedi, whose sister he had married, were defeated by the Vengi king, who ravaged the entire kingdom of the enemies. There has been found at Mudhol, in Yelburga

taluk, a hero-stone belonging to the reign of this king, dated about 898.[16] He was followed by his son Indra III[17] (914-927), who confined his major activities to the north. After this king, there was again a dispute for succession between Amoghavarsha II, the eldest son, and Govinda IV, a younger son of Indra III.

Amoghavarsha, who had succeeded his father in 927, was dethroned by Govinda in about 930. Govinda IV (930-35), who was a lover of pleasure, could not have a hold on the throne for long. The Vengi Chalukyan king Bhima II inflicted several defeats on him. There were rebellions all over the kingdom and finally Govinda was deposed. The next king was Amoghavarsha II whose reign was short. A sort of offensive and defensive alliance seems to have been entered into between Amoghavarsha II and Butuga II, the Ganga king of Talakad. Amoghavarsha's daughter was given in marriage to Butuga II. Krishna III (940-966) was again a powerful king and the last great Rashtrakuta ruler. His numerous campaigns in the south and the east resulted in the addition of considerable territories to his kingdom. He inflicted a crushing defeat on the Cholas, who had succeeded the Pallavas in the south. He also conquered the Pandyas and the Keralas. He also interfered in and had control over the internal affairs of Vengi. Two inscriptions of this king have been found in this district : one at Arakeri in the Yelburga taluk and the other at Uppinabetageri in the Koppal taluk. The first dated about 940 is incomplete and the second dated about 964 records a gift of land by a feudatory named Shankaragaunda to one Naganandi Bhattara for the benefit of a Jaina temple. Krishna III had married a sister of the Ganga king Marasimha III. "No other Rashtrakuta king was the overlord of the entire Deccan in so complete a sense of the term as Krishna was in c. A.D. 965" (*The Age of Imperial Kanauj*, p. 15, Bharatiya Vidya Bhavan, 1955). The next Rashtrakuta king was Krishna III's half-brother Khottiga (967-972). This ruler was a weakling and his reign was the beginning of the end of the Rashtrakuta kingdom. The rulers of Malva, who defeated the Rashtrakuta armies several times, ultimately invaded Malkhed, the Rashtrakuta capital, and burnt it. The capital was, however, soon regained with the help of Marasimha III, the Ganga king. Consequently, at least a part of the Raichur area had come under the control of this Ganga king about this time, as evidenced by a copper-plate grant belonging to the reign of Marasimha III, dated in the year 968 A.D., recently discovered at Kuknur. This plate, beautifully inscribed in old Kannada characters and in Sanskrit language, records gifting of Addavurage (present Adoor) to a scholar named Kolapurya (*See* also illustration). Khottiga died about this time and was succeeded by Karka II in 973. But he was dethroned within a few months by Taila (II), who belonged to the Western Chalukyan line and who, as one of the Rashtrakuta officers in the Bijapur region, was slowly gaining

ground during the reign of Khottiga. Marasimha III made a futile attempt to revive the Rashtrakuta power, by setting on the throne Indra IV, the issue of a son of Krishna III by a sister of Marasimha III.

Chalukyas of Kalyana

The glory of the Chalukyas, which was thus restored by Taila II (973-997), lasted for nearly two and a quarter centuries. After the overthrow of the Rashtrakuta power, Taila ruled from Manyakheta or Malkhed.[18] He spent several years in consolidating his sway in the Western Dekkan over the entire area from the Narmada to the Tungabhadra.

There is a composite stone-inscription[19] found at the Veerabhadra temple of Madinur (referred to as Modeyanur and Moditagrama in the inscription) in the Koppal taluk, of which the first part refers to the reign of this king. It speaks of the benefactions made by the king in connection with his performance of Brahmandakritu in the first year of his reign. The record also recounts his high sounding titles which are expressions of his extraordinary valour. Another inscription referring to his reign has been found at Talakal in the same taluk. This record, which is dated 991, states that at that time Eradarunuru and Banavasi-1200 was in charge of one Sobhanarasa and Kuknur-30 in charge of one Saviyanna.[20]

In all his wars, Taila II was assisted by his son, Satyashraya (997-1008) who succeeded him in 997. Satyashraya continued the expansive policy of his father. His chief opponent was the rising Chola power under Rajaraja (985-1016), who was establishing a strong hold on the eastern Dekkan by active intervention in the affairs of the Vengi kingdom. In 1006, Satyashraya invaded Vengi and reduced some forts. In 1007, ordered by Rajaraja, his son Rajendra invaded the Chalukyan territories. Satyashraya withdrew from Vengi and turned towards the aggressive Cholas. He freed his country from the Chola army, which retired behind the Tungabhadra with much booty. We have an inscription[21] referring to the reign of this king, found in the Navalingeshvara temple of Kuknur in the Yelburga taluk. The record, dated 1005, deals with two religious gifts, one by Ishvara Setti and the other by the people of Kuknur. Satyashraya was succeeded by his nephew Vikramaditya V (1008-1015) whose reign was uneventful. He was followed by his brother Jayasimha II (1015-1042), who, on the contrary, had a very active career. Jayasimha's worst enemy, however, was Rajendra Chola, whose forces marched into the Raichur doab in about 1019. A decisive battle was fought at Musangi (modern Maski) and Jayasimha was successful in driving out the Cholas from his kingdom. But there was no further aggression on the part of Rajendra, the Tungabhadra being recognised as the boundary between the two kingdoms. A worn out stone-ins-

cription of this king has been found at Halageri in the Koppal taluk. It bears a date which approximately equals to the 24th December 1028.[22] Two other inscriptions of his reign come from Maski, in the Lingsugur taluk[23]. They are dated 1027 and 1032. The former is now kept in the Hyderabad Archaeological Museum.

Jayasimha was succeeded by his son Someshvara I (1042-1068), who assumed the title Ahavamalla, Trailokyamalla and Raja-Narayana. An inscription of this king, dated 1052, has been found at Manvi in this district.[24] This king had many grown-up sons, who helped him in his numerous wars. Prince Vikramaditya, the greatest of them, attacked Malva and took its capital Dhara. Immediately after his accession, Someshvara was involved in a protracted war against the Cholas. The Chola king Rajadhiraja invaded the Chalukyan kingdom with a big army. He met with opposition throughout his campaign and was put to a heavy loss, but he went on and made Someshvara withdraw. He finally made a triumphant attack on the Chalukyan capital, pillaged the city and burnt the royal palace. He celebrated his victory there by performing the Virabhisheka and assuming the title Vijayarajendra. About 1046, the Chola king led another victorious campaign against Someshvara. In consequence of these Chola inroads, the normal life in the Dekkan was greatly disturbed. In 1051-52, Rajadhiraja invaded the Chalukyan kingdom for the third time, and was accompanied by his brother Rajendra (II) on this occasion. Someshvara took a bold stand and checked the progress of the enemy beyond Kollapuram. There was another trial of strength between the Cholas and the Chalukyas on the battle-field of Koppam. In the course of the battle, Rajadhiraja fell mortally wounded and there was confusion in the Chola army. Immediately, however, Rajendra renewed the operations with great skill and turned the defeat into victory. After this victory, Rajenda II crowned himself king on the battle-field and returned, there being no annexation of any part of the Chalukyan kingdom. Anxious to wipe out the disgrace of Koppam, Someshvara soon renewed the war, but this attempt also ended in a failure. In the battle of Kudala-Sangama,[25] Someshvara suffered a heavy defeat at the hands of the Cholas.

Soon after this battle, Rajendra II died and was succeeded by Virarajendra, in whose reign also Someshvara had several reverses. Towards the end of his reign, Someshvara was smitten by an incurable disease. On account of this, he decided to put an end to his life and performed 'paramayoga' by drowning himself in the Tungabhadra river on the 29th March 1068. Someshvara I has been hailed as one of the greatest rulers of the Chalukyan line. In the south, despite several reverses, he maintained the wearisome struggle with the Cholas to the last minute of his life. Not that his whole life was occupied by wars

alone. The noble city of Kalyana, which he founded, beautified and made his capital, was entirely his own creation. Someshvara I had three sons: Someshvara, Vikramaditya and Jayasimha. Of these, the first-mentioned, who was the eldest, succeeded to the throne as Someshvara II (1068-1076), assuming the title Bhuvanaikamalla. But the most distinguished of the three brothers was Vikramaditya, whom Someshvara placed in charge of the Banavasi region. The brothers pulled on amicably for some time, after which their relations became strained. Vikramaditya, accompanied by his younger brother, retired to his province in the south, where he was welcomed by the Kadamba king of Goa, the Alupas and the Keralas. Encouraged by this, after reaching his headquarters, Vikramaditya launched an attack on the Chola territory. The Chola king Virarajendra negotiated for peace and gave his daughter in marriage to him.

Soon after this, the Chola king died and Adhirajendra, his son, was in trouble. The Chalukyan prince rushed to the help of his brother-in-law, installed him on the throne and returned to his camp. Almost immediately, Rajendra, the prince of Vengi, deposed Adhirajendra, usurped the Chola throne and began to rule assuming the title Kulottunga. Not satisfied with this, Kulottunga later marched against Vikramaditya himself. Taking advantage of this troubled state of affairs, Someshvara II made friendship with Kulottunga and joined him against his own brother. But Vikramaditya was fully prepared to meet both of them. He first met Kulottunga, defeated and drove him away. Then, turning his attention towards his brother, he defeated him in a decisive engagement and took him prisoner

Vikramaditya VI

Following up this victory, Vikramaditya rushed to Kalyana, seized the Chalukyan throne and proclaimed himself emperor. This was Vikramaditya VI, also known as Permadideva. He assumed the title Tribhuvanamalla and ruled more or less in peace for half a century (1076-1126). About 1085, Vikramaditya marched against the Cholas and took Kanchi. Some time between 1091 and 1093, he wrested Andhra from Vira Chola, son of Kulottunga Chola I. About 1099, he lost Vengi; but took it again by 1118. His inscriptions prove that he was in possession of the Andhra country from 1118 to at least 1124. Vikramaditya VI came into conflict with the Hoysalas of Dorasamudra and sent Jagaddeva, his Paramara ally, to put them down. The Hoysalas gave stiff resistance in the beginning but were finally brought under complete control. The Sinda chief Acha or Achugi II of Erambaragi (modern Yelburga), a loyal subordinate of the Chalukyas, played a very important part in putting down all the revolts in this part of the empire during the reign of Vikramaditya VI. He had a major hand in suppressing the Hoysala rising. Vikramaditya did have many conquests to his credit, 'but much

of it seems to be mere panegyrics'.[26] Vikramaditya VI started an independent era known as the Chalukya Vikrama Era commencing with the date of his coronation. A slightly damaged stone-inscription from Hyderabad Museum,[27] originally belonging to some village in the Lingsugur taluk, cites the first year of this era. From this, the date of the beginning of the Chalukya Vikrama Era has been calculated to be Chaitra Shuddha 1, Saka Varsha 999, Pingala, corresponding to Sunday the 26th February A.D. 1077.[28] Several other inscriptions, referring to the reign of this king, have also been found in this district in places like Kallur, Halligudi and Kuknur[29] all in the Yelburga taluk, Munirabad[30] in the Koppal taluk, Karadikal[31] in the Lingsugur taluk, Gabbur[32] in the Deodurg taluk (this inscription is at present in the Hyderabad Archaeological Museum) and Lingsugur.[33] Bilhana, the famous Sanskrit poet, flourished at his court and wrote *Vikramankadevacharita*, Vijnaneshvara, the famous author of *Mitakshara*, also flourished in his reign.

Vikramaditya was succeeded by his son Someshvara III (1126-1138), who assumed the titles Bhulokamalla and Tribhuvanamalla. This king was a lover of peace. The feudatories took advantage of his weak rule and became aggressive. The Hoysala king Vishnuvardhana led an expedition against the Chalukyan kingdom, but he was routed by the Chalukyas. Someshvara was a great author and wrote an encyclopaedic work called *Manasollasa* or *Abhilashitarthachintamani*. He was given the title Sarvajna-Bhupa or Sarvajna-Chakravarti. At least three inscriptions referring to the reign of this king have been found in the district.[34] In addition to the second part of the Madinur inscription referred to above, there are two more inscriptions, one from Kallur dated 1132 and the other from Kuknur dated 1129. From the Kallur record, we can see that the region of Kuknur—30 was administered by the Sinda chief Permadi son of Acha II. Jagadekamalla II (1138-1151), who followed Someshvara III, was an insignificant king. Four inscriptions belonging to his reign have been found in the distrcit;[35] one of them is from Alawandi in the Koppal taluk and the other three from Kuknur in the Yelburga taluk. In his reign, the feudatories became bolder and launched independent careers. The Hoysalas of Gangavadi and the Kadambas of Goa revolted in the south ; but they were put down with the help of the Sinda king Permadi. The next king was Taila III (1151-1163), in whose reign the deterioration of the kingdom reached its climax. His inscriptions prove that his kingdom extended to Shimoga, Cuddapah and Kurnool districts in the south. About 1153, he successfully repelled the attack of the Chalukya king Kumarapala of Gujarat. At this time, the Kakatiya Prola of Telangana revolted. When Taila, along with the Santara chief Jaggadeva, marched to Warangal to punish him, he was himself defeated and taken prisoner by the Kakatiya,

who, however, is said to have released him immediately. This was a serious blow to the prestige of the Chalukyas. Meanwhile, the kingdom was shattered by internal revolts also.

Kalachuris

The feudatory chief Bijjala of the Kalachuri dynasty, who was gaining strength gradually, ultimately took the reins of power in his own hands in 1157. Some authors take this year to be the last year of Taila III's rule. But we know that Bijjala and other subordinates acknowledged the nominal sway of the Chalukyas till the death of this king in 1163. An inscription from Alawandi in this district cites its date in the 9th regnal year of this ruler which means approximately 1158. Besides this, three other inscriptions referring to the region of this king have been found in this district, all coming from Kuknur. Here there was a break in the Chalukyan rule and the Dekkan was ruled by Bijjala and his successors for about a quarter of a century, till the fortunes of the Chalukyas were restored by Someshvara IV (1181-82 to 1189 or 1192), son of Taila III. The political status of Someshvara IV during the Kalachuri ascendancy is not known. According to some, he resided at Annigere in the Dharwar district during this period. In any case, he ascended the throne in 1181-82: a composite inscription from Kaulur, in the Koppal taluk, records a grant made in the cyclic year Parabhava (A.D. 1186) which, it states, was the fifth regnal year of Someshvara IV. Within two or three years, he defeated the Kalachuri rulers Ahavamalla and Singhana and recovered all the lost territories. There are other inscriptions to prove that he was on the throne of Kalyana in 1181-82 and that his kingdom included Shimoga, Chitradurga, Bellary and Bijapur districts. The kings of Banavasi, Dorasamudra and Nolambavadi were his feudatories. His last year usually accepted is 1189: but an inscription from Balganur, in the Sindhanur taluk of the Raichur district, which, incidentally, introduces a Haihaya Mahamandaleshvara Mallidevarasa, refers to the reign of this Chalukyan monarch and pushes his reign upto 1192.[36] No doubt, he was deprived of his sovereignty of the Dekkan by the Yadava king Bhillama in, or even before, 1189. But there are other records to show that he was alive and ruling in 1198. Of course, during this latter period his authority was confined mostly to the southern or the south-western parts of his kingdom. In addition to the Kaulur inscription mentioned above, two more inscriptions referring to the reign of this king have been found in this district. One of them forms a part of the Madinur composite inscription and the other comes from Kallur. Dated 1185, the latter refers to the reign of Someshvara IV and the rule of the Sinda brothers, Vira Bijjala and Vikramaditya of Erambaragi.[37]

Kalachuri Bijjala, who wrested the sovereignty of the Dekkan from Taila III, was a member of one of the branches of the Kalachuri family, which ruled in different parts of the Dekkan as

feudatories of the Chalukyas since the beginning of the seventh century A.D. According to the Nerur grant and the Mahakuta pillar inscription, Buddha, a Kalachuri king, was defeated by the Chalukyan king Mangalisha (598-610) and his territories were appropriated. The origin of the Kalachuris is not yet a settled problem. According to one view, they were formerly foreigners (probably Turkish) who entered India 'in the train of the Hunas and the Gurjaras'[38]. Whatever be their origin, a majority of the scholars hold that the Kalachuris of the Dekkan came from northern India. They are said to have migrated to the south after being dispossessed of their territory in the north by the Gurjara Pratiharas about the beginning of the ninth century A.D. and settled at Mangalivada (modern Mangalavedhe in the Sholapur district).[39] The earliest name known in this line is that of Uchita, belonging to the first quarter of the tenth century A.D. The fifth in the line was Bijjala I, who was a subordinate of Someshvara I. The Bijjala, who took the throne of Kalyana from Taila III, was Bijjala II, who was originally governing Tardavadi in the Bijapur district and later was in charge of the entire southern division of the Chalukyan kingdom, including Tardavadi, Banavasi and Nolambavadi.

Several inscriptions of his show that he became the master of the Dekkan in 1157 and occupied Kalyana before 1160, until which time the Kalachuri capital was at Mangalivada. He devoted the early years of his reign to putting down the disturbances in the south. He defeated the Hoysala king Narasimha I and the Pandya chief Vijaya Pandya. He also fought successfully with the Cheras, the Cholas, the Andhras and the Kalingas. In the north, he defeated the Chalukya king Kumarapala of Gurjara, Lata, Saurashtra and Malva, and the Kalachuri king Jayasimha of the Chedi country. During his reign, his Erambaragi subordinate was the Sinda ruler Chamunda II. A lengthy inscription,[40] dated A.D. 1163, which refers to the reign of Bijjala II, has been found in the Mallikarjuna temple of Kuknur in this district. It has now been proved that Bijjala was not a Jaina, but an orthodox Shaiva and that the reason for his quarrel with Basaveshvara, his prime minister, did not lie in the difference in religion but in the radical reformist views of the latter.[41]

Basaveshvara

Egalitarian reforms preached by Basaveshvara and his associates and their saintliness, piety and learning made the Veerashaiva creed very popular. Men and women from several parts of the country, including princes and other eminent persons, came to Kalyana and accepted the teachings of Basaveshvara and other Sharanas. Basaveshvara's opponents were not slow in working to heighten the king's prejudice and poured poison into his ears against Basaveshvara. Finally, the king was prevailed

upon by them to make use of his powers to suppress the Veerashaiva movement. About this time, with the blessings of Basaveshvara, a marriage took place between the daughter of a Brahmin follower and the son of an 'untouchable' follower of his and this was severely frowned upon by the orthodoxy. Bijjala ordered the massacre of the parents of the bride and bridegroom. As a result, there was violence and upheaval in the capital. Basaveshvara was sorely grieved at the unsavoury turn of events and tried to stem the tide of violence and later left for Kudala Sangama, where he became one with his tutelary deity, according to a legend. In the insurrection that followed at Kalyana, Bijjala was killed.

Sovideva

Bijjala had four sons and a daughter who was given in marriage to the Sinda ruler Chavunda II of Erambaragi. Someshvara (1168–1177), who succeeded Bijjala II, was also known as Somadeva and Sovideva and had assumed the title Raya-Murari. He had also a number of conquests to his credit; his kingdom included the Shimoga district in the south and Krishna district in the east. The succession was hotly disputed, the throne being claimed by also Mullugi, Bijjala's brother, and Karnadeva, Bijjala's grandson; but Sovideva finally came out successful. Two inscriptions of Sovideva have been found in this district, one of them dated 1170 coming from Kuknur[42] and the other dated 1175 from Balganur.[43] The former states that Sovideva was ruling from Modenur or modern Madinur in the Raichur district. This place, which has also been referred to in the inscriptions as Modeganur, Modeyanur and Muduganur, was one of the alternative capitals of the Kalachuris. It must have been a strong and well-fortified town of strategic importance; for, it figures as one of the forts taken by the Hoysala king Vishnuvardhana in his northern expedition.[44] It is quite possible that Sovideva chose this place as his second capital on account of the disturbed political condition at Kalyana at the beginning of his reign.

Sovideva was succeeded by his younger brother Sankama II (1177-1180). This king had a very able general Kavana, who had 72 officers to serve him and who made a number of conquests in all directions on behalf of his master. The Sinda subordinates under Sankama were Ishvara-bhupa governing Banavasi and Edevatte and Vikkayya governing Erambaragi. A very long inscription referring to the reign of this king has been found on a slab in the *Mukhamantapa* in the Mahamaya temple of Kuknur in this district.[45] Dated A.D. 1178, this inscription has been handsomely engraved in mediaeval Kannada characters and has been composed in the form of poetry of a highly classical order. Another damaged and partly worn-out inscription[46] referring to the reign of this king has been found at Kaulur (called Kaururu or Kauravapura in the inscription). The inscription speaks of

grants made to the temple of god Harihara during the years 1177, 1178 and 1179. Sankama was succeeded by Ahavamalla (1180-1183), his younger brother. Like his predecessors, Ahavamalla carried on campaigns against his neighbours and successfully fought with the Andhra, Chola, Hoysala, Kadamba, Silahara and Paramara kings. In 1181, the Chalukyan ruler Someshvara IV succeeded in wresting from him the larger portion of the Dekkan, including Kalyana. After this, Ahavamalla continued to rule Belvola and Banavasi till 1183, when he was succeeded by his younger brother Singhana. A copper-plate grant[47] of this king, who was the last independent ruler of the family, has been found at Itgi, in the Yelburga taluk. The grant, dated 1183, is in Nagari script and written partly in Kannada. The subject-matter of the grant is the gift of Kuknur, in the tract of Belvola-300 by Singhana to 1,000 learned Brahmanas. In 1183-84 Singhana surrendered Belvola and Banavasi to the Chalukya king Someshvara IV and acknowledged his supremacy. An inscription dated 1184 mentions this Kalachuri king as a feudatory of Someshvara and there is no trace of this family after this date.

Yadavas or Sevunas of Devagiri

Before appearing as one of the most important royal families in the Dekkan, the Yadavas of Devagiri ruled over the country comprising Khandesh, Nasik and Ahmadnagar districts of Maharashtra, as feudatories of the Rashtrakutas of Malkhed and the Chalukyas of Kalyana. The first independent ruler of this dynasty was Bhillama V (1187-1191). Bhillama was the first king to realise the weakness of the Chalukya king Someshvara IV and take advantage of it. He had a number of able generals, such as Jaitrasimha, Peyiya Sahani, Mayideva and Lakkhana, with whose help he raised a large army and launched an aggressive campaign. He wrested from Someshvara IV not only Kalyana, the capital of the Chalukyas, but also Kisukad-nad, the capital of which was Erambaragi (modern Yelburga). Tardavadi-nad (round about Mutgi in the Bagewadi region of the Bijapur district), Belvola (the north-eastern part of the Dharwar district and the south-western part of the Raichur district) and the adjoining territories. The Chalukyan emperor took shelter with Jayakeshi III, the Kadamba king of Goa. Bhillama next invaded the kingdom of the Hoysalas of Dorasamudra, who had also taken advantage of the weakness of the Chalukyan rule and declared independence about this time. The Yadava king not only overran the Hoysala kingdom, but also invaded the territory of the Cholas and had a victory over Kulottunga III. He, however, suffered a severe defeat at the hands of the Hoysalas in 1188-89, when he was forced to withdraw from the Hoysala country.

During the closing years of Bhillama's reign, there was another terrible struggle between him and the Hoysalas, this time the Hoysala king Ballala II being aggressive. After having a number of victories in the southern part of the Dharwar district,

the Hoysala king was stopped at Lokkigundi (modern Lakkundi, near Gadag), by the Yadava army. But there also, Ballala II had an upper hand and pursued the Yadava general northwards. Then Ballala advanced towards Erambaragi which was defended by a number of fortresses. Within a short time, the city was taken by the Hoysala army, which advanced further upto the Krishna river in pursuit of the Yadavas. All these conquests made Ballala master of Puligere (the country round about Lakshmeshvara in the Dharwar district), Belvola, Kisukadu and the adjoining territories upto the Heddore, *i.e.*, the Krishna river. After finishing his northern conquests, Ballala is said to have made Erambaragi his capital for the northern portion of the kingdom and is known to have resided there in 1196. An inscription[48] referring to the reign of this king has been found at Karadikal in the Lingsugur taluk. Dated 1191, the inscription introduces his feudatory Mahamandaleshvara Bajjarasa of the Kadamba family[49]. According to Hemadri, Bhillama founded the city of Devagiri and presumably made it his capital.

The earliest mention of Devagiri as the capital of the Yadavas, however, is found in an inscription of Jaitugi, also known as Jaitrapala, son of Bhillama, dated 1196. Jaitugi (1191 to 1210-11) failed to dislodge the Hoysalas from Kisukadu and Belvola. East of that, he, however, succeeded in wresting the eastern portion of Sindavadi country in which was situated the modern Adoni region. About this time, the northern parts of the Kurnool district also seem to have passed into the hands of the Yadavas. The extension of the Yadava kingdom to the confluence of the Krishna and the Tungabhadra brought Jaitugi in conflict with the Kakatiyas of Warangal. The Kakatiya ruler Mahadeva tried his best to resist the advance of the Yadavas but failed. In the engagement that followed he lost his life and his young son Ganapati was taken prisoner. Subsequently, Jaitugi released the young Ganapati and placed him on his paternal throne. Like his father, Jaitugi also waged successful wars against his neighbours to the north of the Narmada; the Paramara Subhatavarman and the Chalukya Bhima II yielded to his force.

Singhana

Jaitugi was succeeded by his son Singhana (1210-11 to 1246-47), who was the most distinguished member of this family. Singhana tried to establish an empire in the Dekkan, his only real obstacle being the Hoysalas in the south. In 1211, Singhana, with the assistance of his able general Bichana, launched an expedition against the Hoysala king Ballala II. The Sinda chief Vikramaditya of Erambaragi, who was now a vassal under the Hoysalas, submitted to him immediately. This was followed by other submissions and Belvola, Huligere, Masavadi and Hanungal (modern Hanagal) fell before him in quick succession. These and other conquests brought Singhana to the northern border of Banavasi. A fiercely contested battle took place at

this stage between him and Ballala II, which resulted in Singhana's victory. By the year 1213, Singhana had conquered the whole of Banavasi and Santalige and reached the banks of the Tunga river. Encouraged by this success, he marched towards Dorasamudra, making a bid for the whole of the Hoysala kingdom. Like his grand-father (Bhillama), Singhana reached the Kaveri river in the course of his conquest. But eventually, he had to withdraw to the north of the Tunga river, which formed the southern boundary of his kingdom. Singhana's empire extended from Khandesh upto the Shimoga and Anantapur districts and from the western coast to the eastern parts of the former Hyderabad State and Berar.

Four inscriptions referring to the reign of Singhana have been found in this district. The earliest one is that found at Mudgal, dated 1255.[50] From this inscription, which records a gift of land, we can see that Mudgal (Mudugal) was the capital of the region called Karadikal—400, which was administered by Bajja. The next inscription in point of time, dated 1231, comes from Kuknur and records a series of grants made to the one thousand Mahajanas of that place by various persons, the last of them being the Yadava king.[51] The third, coming from Sankanur, Yelburga taluk, is dated 1283 and states that it was his 45th regnal year.[52] From this and some other similar records, it follows that the first year of Singhana's reign was 1194, or, more probably, that Singhana was taking active part in the administration of the kingdom even during the reign of his father, Jaitugi. The last inscription, recording a land gift to a Jaina temple, comes from Koppal and is dated 1240.[53] After the death of Singhana in 1247, there appears to have taken place a war of succession between Sarangapani, the second son of Singhana and Krishna, son of Jaitugi II who was the first son of Singhana but who had predeceased his father.

rishna, adava king

Krishna, with the help of his brother Mahadeva, gained the upper hand and forced his uncle to leave the kingdom. Krishna (1247-1261) continued the policy of his grandfather, which was to extend the Yadava territories in all directions. He sent his general Chamunda against Someshvara, the Hoysala king. Chamunda succeeded in taking the Kogali division, which consisted of the areas round about Hadagali in the Bellary district and Davangere in the Chitradurga district. Another of his generals, Malla, is said to have defeated the Silaharas of North Konkan and the Pandyas of Nolambavadi. Krishna also gained some success against the Paramaras of Malva and the Vaghelas of Gujarat. About this time, the Yadava army appears to have encountered some Muslim forces, probably those who invaded the Paramara kingdom in 1250 under Balban. A damaged and worn-out inscription referring to the reign of this king has been found at Sankanur in the Yelburga taluk.[54] This inscription

dated 1252, describes the king's subordinate, who was a great conqueror and governor of Belvola-300, Kelavadi-300, Banavasi-12,000, Masavadi-nadu and Kisukadu-70. His name appears to be Bhannama. Though he had a son named Ramachandra, Krishna appointed his brother Mahadeva, his heir apparent, who succeeded him in 1261. Mahadeva (1261-1271) continued hostilities with the Hoysalas, the Silaharas of North Konkan, the Vaghelas of Gujarat, the Paramaras of Malva and the Kakatiyas of Warangal. He made an attempt to penetrate into the heart of the Hoysala kingdom, but failed in it. The last year of his reign was 1270-71.

Krishna's death was followed by a civil war in Devagiri between his son Amana and his uncle Krishna's son, Ramachandra. The latter, not finding it possible to capture the impregnable fort of Devagiri by open fighting, took recourse to an unchivalrous means to achieve his end. It is said that one evening he introduced a body of soldiers into the fort in the guise of dancers for giving a performance in the king's court and when Amana and his retinue were absorbed in the entertainment, the soldiers threw off their masks and took the royal guards by surprise. Amana fell captive into the hands of Ramachandra, who later blinded and killed him.

Ramachandra, Yadava king

Ramachandra (1271-1310), immediately after coming to the throne, made a desperate attempt to crush the power of the Hoysalas. A large army, under an eminent general, was despatched, which overran the northern parts of the Hoysala kingdom. It then marched towards Dorasamudra itself, but could not take it. There was a tough opposition from the Hoysala side. The Hoysala generals, Chikkadeva, Ankanayaka and Khandeya Raya Raneya, not only played havoc in the Yadava army, but also pursued the retreating enemy upto the border of the Shimoga and the Chitradurga districts. Thus the Yadava invasion against the Hoysalas ended in utter disaster. Ramachandra's military operation against Gujarat also was foiled by the Vaghela king Sarangadeva. He was, however, successful in his campaigns against the chiefs of Dahala, Bhandagara, Vajrakara and others. Inscriptions of Ramachandra prove that in the early years of his reign, he succeeded in maintaining intact the empire he had obtained from his predecessors. The governors of Sindavadi and Kisukadu in his reign were Bhimadeva Rane and Vasudeva Nayaka respectively. When Ramachandra was ruling his empire peacefully, Ala-ud-din Khilji, governor of Kara, descended upon Devagiri in 1294. Ramachandra's attempt to resist the invader bore no fruit ; Ala-ud-din attacked Devagiri and pillaged it. The Yadava king was ultimately driven to conclude a treaty and pay a huge amount of gold. When all this happened, Shankaradeva, son of Ramachandra, was absent from the capital. When he heard the news, he hurriedly came back and disregarding his

father's advice, attacked the retreating army of Ala-ud-din. Enraged by this, Ala-ud-din, who overpowered him, forced Ramachandra to agree to more stringent terms.

This defeat of Ramachandra at the hands of Ala-ud-din irretrievably impaired the political prestige of the Yadavas. Their opponents on the east and south now began to press hard on them. The Kakatiya Prataparudra pushed the western border of his kingdom as far as Medak and Raichur. In 1305, the Hoysala king Ballala III led an army against Ramachandra and wrested from him Banavasi, Santalige and Kogali. When the Yadavas were fighting against their opponents in the south, the Dekkan was again raided by the Muslims. In 1307, Ala-ud-din Khilji sent Malik Naib Kafur with a large army. Malik Naib overran the Yadava kingdom and took Ramachandra prisoner, who, however, was later released with honour and allowed to rule his kingdom as a vassal of the Sultanate of Delhi. When, in 1308, Malik Naib came to Devagiri with an army for invading the Andhra country, he received substantial help from Ramachandra. The invader also received similar help from him during his march against Dorasamudra in 1311. Ramachandra was succeeded by his son Shankaradeva (1311-1313), who, by his hostile activities, soon proved an opponent of the Sultan. In an expedition against the Dekkan in 1313, Malik Naib killed Shankaradeva and assumed the government of Devagiri. But being needed by his ailing master, he had to leave Dekkan soon. Taking advantage of this situation, Harapala, the son-in-law of Ramachandra, revolted and declared independence. But Harapala's success was short-lived; for in 1317, Mubarak, son and successor of Ala-ud-din, defeated him and recovered Devagiri. Harapala was flayed alive in 1318. This brings us not only to the end of one of the most glorious dynasties of the Dekkan, but also to the end of Hindu era in the history of the Dekkan.

Cholas

The Cholas were a South Indian dynasty and their connection with the Raichur district was only as occasional intruders and invaders. The Chola kings, who made extensive conquests in the north, were Rajendra I (1012-1044), Rajadhiraja (1018-1052), Rajendra II (1052-1063) and Virarajendra (1063-1070). The Chalukya Jayasimha, who was defeated at Musangi (Maski) in 1021, soon got back the Raichur doab, re-established his authority upto the Tungabhadra and even penetrated into the Bellary region. During the reign of the next king Rajadhiraja, a bloody battle was fought between himself and the Chalukya Someshvara I at Koppam (modern Koppal), in the course of which Rajadhiraja was killed; but war was continued by Rajendra II who killed several of the Chalukya generals and returned victorious. The same was the case with Virarajendra also, whose inscriptions say that he "saw the back" of (*i.e.*, defeated) his Chalukya enemy five times, and who had assumed characteristic titles like

Ahavamalla-Kulakala or destroyer of the family of Ahavamalla Someshvara I and Vallabha-Vallabha or Lord of the Western Chalukyas who called themselves Prithvi-Vallabhas or lords of the world. But in spite of the frequent defeats of the Chalukyas and the serious injury done to some parts of their territories, the Cholas failed to reduce them to vassalage or annex for any considerable time any portions of their territory.

Hoysalas

The Hoysalas of Dorasamudra and the Kakatiyas of Warangal were the two great contemporaries of the Yadavas of Devagiri, on the south and the east respectively. We have seen above how the three kingdoms, in the ceaseless efforts to expand their territories, came in conflict with one another. Naturally, the Raichur doab, which is situated in the middle of these three kingdoms was the worst affected part during these conflicts. Though the Yadavas of Devagiri were the major paramout power in this region throughout the period of their regime, we have evidence to prove that the doab, or a part thereof, had passed on either to the Hoysalas or the Kakatiyas during some short periods in its history.

The Hoysalas had their origin in the hilly tracts to the north-west of Gangavadi, their original home, traditionally being located in a village in Mudigere taluk in Chikmagalur district. The early Hoysalas were the feudatories of the Chalukyas of Kalyana, Ballala II (1173-1220) being the first independent king. The attempts made by the earlier kings to become independent had met with failures. One such attempt was made at the time of Vishnuvardhana (1106-1141), whose inscriptions claim that the king had conquered Belvola, Hanungal, Banavasi and Nolambavadi, and his horses, in the course of his victorious march, bathed in the Krishna river some time before 1120. In some other inscriptions,[55] Modeganur (modern Madinur in Koppal taluk) and Rachavoor (modern Raichur) figure, with some other places, among the forts conquered by Vishnuvardhana. But we have seen above, under the Chalukya Vikramaditya VI, that Vishnuvardhana was defeated and forced to retreat by the Chalukyan king with the help of the Sinda chief Acha II of Erambaragi. These claims and counter-claims, of course, reflect the different phases of the conflicts between the two powers. Next, during the reign of the Yadava Bhillama V (1187-1191), we come across another major northern conquest on the part of the Hoysalas. Ballala II (1173-1220), in the course of his sweeping campaign against the Yadavas, advanced upto the Krishna in pursuit of the Yadava forces. As a result of the conquests he made during this campaign, Ballala II became the master of Huligere, Belvola, Kisukadu and the adjoining territories upto the Krishna river. He is actually said to have made Erambaragi his capital for the northern portions of his kingdom and resided there in 1196. All these areas were taken back by the Yadava king Singhana during

his expedition against the Hoysalas in 1211. We have already seen that the Sinda chief Vikramaditya of Erambaragi, who was a vassal under the Hoysalas during this period (1191-1211) of Hoysala ascendancy, submitted to Singhana in 1211. After this, the Tungabhadra remained the border between the two kingdoms. A Hoysala inscription belonging to this period has been found at Alawandi in the Koppal taluk.[56] The inscription, which is damaged and worn out, is dated 1203, and refers to the reign of Ballala II.

Kakatiyas

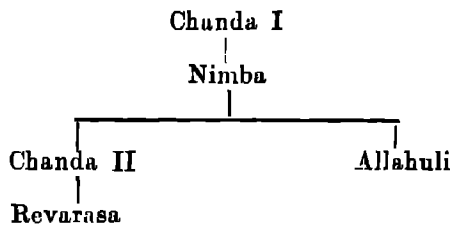
The Kakatiyas were another major dynasty of the Dekkan, which played a prominent part in shaping the political and cultural destinies of the Andhra people in particular. The Kakatiyas were originally village headmen under the Chalukyas of Vengi. One Beta (I) carved out an independent principality during the early years of the eleventh century A.D. When, during the reign of Someshvara I (1042-1058), there was a struggle between the Chalukyas of Kalyana and the Cholas, and both the parties tried to obtain influence in Vengi, the then Kakatiya chief Prola I chose to take the Chalukyan side and rendered Someshvara I valuable service in his campaigns against the Cholas. The Chalukyan emperor, in return, rewarded him with the grant of the territory known as Anamakonda-Vishaya. The next Kakatiya ruler, Beta II, was a feudatory of the Chalukya Vikramaditya VI who gave him the region of Sabbi-sayira which may be identical with Sabbinadu in the neighbourhood of Karimnagar. The next ruler Prola II also began a career of expansion. He actively helped the Kalachuri Bijjala in deposing and driving away Taila III, immediately after which event he declared his independence. Towards the end of the reign of the Yadava king Ramachandra, *i.e.*, in the early years of the fourteenth century, the Kakatiya king Prataparudra took advantage of the weakness of the Yadava kingdom and pushed his empire at least upto Medak and Raichur in the west. Since then for well over a century, the eastern parts of the Raichur district, including Raichur town, appears to have been under the Kakatiyas. According to an inscription on a huge stone (42 feet by 3 feet) in the Raichur fort, the Raichur fort was built by one Gore Gangaya Raddivaru, a minister of the queen of Warangal, in 1294.

Feudatory families[57]

While the Chalukyas of Kalyana and the Yadavas of Devagiri were the paramount powers in the western and central parts of the Dekkan, there were a number of feudatory families put in charge of the different parts of their empires. The following are the more important feudatory families ruling in different parts of the Raichur district.

Haihayas

Chiefs belonging to the Haihaya clan, claiming descent from Kartavirya and calling themselves lords of Mahishmatipura, are known to have ruled in parts of Karnataka, particularly in the

north-eastern parts of the State, during the eleventh and twelfth centuries A.D. For instance, there were Haihaya families administering the regions Aral-300 and Mirinte-1300, roughly comprising the modern Sedam and Chitapur taluks of the Gulbarga district. Now, the Manvi inscription (No. 5) of the Chalukya Someshvara I, already referred to above, discloses, for the first time, the existence of one more family of the Haihayas which had settled in Raichur district. The inscription, dated 1052, introduces the Mahamandaleshvara Revarasa, a subordinate of Someshvara I, having the characteristic titles, Mahishmatipuravareshvara and Kartaviryakulatilaka. The fact that he was placed in charge of a major province like Ededore—2,000 shows that he must have been a fairly influential noble in the Chalukya kingdom. Two more inscriptions dealt with by Barnett and Fleet[38] supply some more details about this Revarasa. One of them, belonging to Yewur and dated 1042, states that he was the subordinate of Jayasimha II and that he was the son of Chanda. The other, coming from Kembhavi, which appears to have been the headquarters of Revarasa and his family, gives a fuller genealogical account as follows:—

The members of both the Gulbarga and the Raichur branches of the Haihaya family are spoken of as having belonged to the lineage of one Ayyana, which indicates their common descent. The Balganur inscription of Someshvara IV (No. 15), dated 1191-92, introduces two chiefs of the Haihaya family, as subordinates of the Chalukya king. One of them was Mahamandaleshvara Mallideva, having his headquarters at Madana-Siriyuru. The other is Allahuli.

Kadambas

A number of chiefs belonging to the various branches of the Kadamba stock are known to have ruled in the southern and western parts of Karnataka. Dr. P. B. Desai's collection has brought to light, for the first time, the existence of another hitherto unknown family of the Kadambas, who ruled in the region of the Raichur district. The Hyderabad Museum inscription (No. 6), dated 1077, introduces Mahamandaleshvara Nagavarmarasa, as a subordinate of Vikramaditya VI, and his governor Tribhuvanamalla-Vira-Nolamba-Pallava-Permanadi, administering the area of Karadikal-400. That this Nagavarmarasa was a Kadamba chief is clear from his characteristic titles: Banavasipura-vareshvara and Kadambarabharana. It may be noted here

that this name is found among the early members of the Hanagal and Goa branches of the Kadamba family. More facts regarding this Kadamba family are disclosed by two inscriptions in the dilapidated Jadeya Shankara temple at Naoli, a village on the eastern bank of the Krishna in the Lingsugur taluk.[59] One of them, belonging to the reign of Someshvara I, registers the grant of Navile (modern Naoli) to the temple of god Jadeya Shankara by Mahasamanta Nagavarmarasa of the Kadamba family. The village was situated in the Karadikal-400 region. This inscription is dated 1006 and it, therefore, pushes back the date of this chief by eleven years.

Butarasa

The first part of the second inscription introduces another member of the Kadamba family, namely, Mahamandaleshvara Butarasa who also bore the epithets of the above chief. The epigraph, belonging to about 1119, records a grant to the same temple. This Butarasa might have been a successor of Nagavarmarasa. An inscription from Maski, dated in Chalukya Vikrama year 38, Vijaya, equivalent to A.D. 1113, also speaks of this Butarasa.

Another inscription from Lingsugur (No. 9) mentions a still later member of this family, probably the successor of Butarasa. This is Madhavattiyarasa who figures also in the second part of the second inscription from Naoli. This portion of this epigraph bears the date 1135.

After a gap of about 60 years from this date, we get two inscriptions, one from Karadikal (No. 16) and the other from Mudgal (No. 17), which belong to the years 1191 and 1215 respectively. These inscriptions describe a subordinate family of Kadamba chiefs, who were administering the area of Karadikal-400 from their headquarters at Mudgal. The name of the family in both the records is, however, spelt as Kadamba. The Karadikal record furnishes the following succession of the members of the family :—

The last-mentioned king was ruling on the dates of both these inscriptions.

Sindas

Reference has already been made to a few members of the Sinda family of Erambaragi and the part played by them in the Dekkan politics as the loyal feudatories of the Chalukyas of Kalyana and the Yadavas of Devagiri. Like the Kadambas, the Sindas also were a pervasive family who ruled in different parts of Karnataka. Their branches are also known to have ruled in Andhra and Central India.

One branch appears to have settled in the Bellary district and the adjacent area, which was subsequently known as Sindavadi-1,000. Northwards, there were the Sindas of Yalburgi, who held parts of the Dharwar, Bijapur and Raichur districts. An inscription from Kuknur (No. 13) mentions two chiefs of this branch, Permadi and his brother Chavunda, for whom we have the dates 1144 and 1151–69. The earliest reference to the Sinda-Vishaya is in the Javli copper-plates of A.D. 750.[60] The earliest date assignable to the Sindas of Yalburgi as a separate unit is about 1076.[61] We get references to the members of the Sinda dynasty of Yalburgi in four inscriptions coming from that area. The inscription dated 1132,[62] which introduces Acharasa and his son Permadi, states that Permadi was ruling the Kuknur-30 division. The Mudhol inscription,[63] referring to the reign of Taila III, introduces Chavundarasa. The Kallur inscription[64] dated 1185, gives some details about the family. According to this record, Chavundarasa married the two daughters of the Kalachuri Bijjala, namely, Siriyadevi and Lankadevi; he had two sons Viravikramaditya and Virabijjala from Siriyadevi; and these two were jointly ruling in 1185. Viravikramaditya has been referred to in another inscription also.[65]

Mediaeval Period

Khiljis and Tughlaks

Under the Yadavas of Devagiri, we have already seen that the Yadava kingdom was finally annexed to the Khilji empire by Mubarak Shah in 1318. One Malik Yak Lakhy was made governor of Devagiri; subordinate officers and collectors of revenue were stationed at different places, and garrisons posted at strategic points. What happened thereafter, need not concern us here. For, considerable areas of the Yadava kingdom did not submit to this new rule and the present Raichur district formed a part of the kingdom of Kampili (which also included parts of Bellary and Dharwar districts), which remained outside the Muslim empire and proclaimed its independence under Singeya Nayaka and his more famous son Kampilaraya. Malik Kafur had tried to annex this part also. He had led an indecisive expedition against Kampili. But before he could make another attempt at it, he was recalled to Delhi where he died in the political revolution that took place during the period between the death of Ala-ud-din (1316) and the accession of Kutb-ud-din Mubarak Shah.

After the death of Mubarak Shah, there was again a political revolution at Delhi, which ended the Khilji dynasty and ushered in that of Tughlaks. The Kakatiya king Prataparudra II took advantage of this opportunity and declared himself free and his example was bound to be followed by others. Sultan Ghiasuddin was shrewd enough to realise the mistake in the policy followed so far, namely, that of allowing the Hindu rulers of the Dekkan to remain nominally subordinate to Delhi and otherwise in full enjoyment of their sovereign powers. He, therefore, decided to reduce them and annex their territories. Resolving to do away with the Hindu kingdoms of the south, one after another, he began in 1231 by sending against Warangal an expedition led by his son and heir, Ulugh Khan. The army marched as usual by way of Devagiri, laying waste the country and investing fortresses as soon as it entered Telangana. Prataparudradeva, who first defeated Ulugh Khan, ultimately delivered himself and his family into his hands in 1323. Soon after returning from this successful expedition in the Dekkan, Ulugh Khan killed his father and ascended the throne of Delhi, assuming the title Sultan Muhammad.

Kampilaraya

At the time of the accession of Muhammad-bin-Tughlak, considerable portions of the Dekkan and South India acknowledged the sovereignty of Delhi. Devagiri and Warangal were under the effective control of imperial officers, and a viceroy had been stationed over the distant 'Mabar' charged with the duty of consolidating the new conquests. The only prominent Hindu States that still continued to enjoy independence were Kampili and Dorasamudra. The king of Kampili, Kampilaraya, rose to prominence in the early years of the 14th century. Kampilaraya was a consistent opponent of the growing alien power in the south; he declined to comply with a demand for tribute from the officers of Muhammad Tughlak, and entered into friendly negotiations with Baha-ud-din Gurshasp, a cousin of Muhammad and governor of Sagar near Gulbarga, who, having some grievance against his cousin, had laid claim to the Delhi throne and set up the standard of revolt. The Sultan thereupon ordered the governors of Gujarat and Devagiri to deal with the rebel. A battle took place between the two parties in which Gurshasp was defeated and he fled to Sagar and thence, with his women and children, to Kampili to take refuge with Kampilaraya. The Sultan, who in the meanwhile had taken the field in person and come down to Devagiri, took up in his own hands the task of reducing the defiant Hindu ruler who had harboured the rebel. But it proved more troublesome than he had imagined, and two expeditions failed to take the strong fortress of Kummata in the Kampili kingdom. The third attempt led by Malik Zada, however, ended in success; Kummata fell and Kampilaraya was forced to shut himself up in Hosadurga (Anegundi), which was invested on all

sides by the Sultan's troops. Lack of provisions made it impossible for the inmates to hold out long; but meanwhile Kampilaraya had succeeded in sending Gurshasp and his family to Dorasamudra, commending them to the care of Ballala III.[66]

Kampilaraya met his end with courage and determination. It is said that before sallying out of the fort and falling upon the enemy, he announced to his women that he had made up his mind to die fighting and advised them to burn themselves in advance to escape falling into the hands of the enemies, and that they did so cheerfully and their example was followed by the wives and daughters of the ministers and nobles of the kingdom. Kampilaraya's head was stuffed and sent to the Sultan to announce the victory and a garrison was posted at Hosadurga to control the country round about. For some time after the fall of Kampili, Muhammad-bin-Tughlak remained at Devagiri, making arrangements for transfer of the imperial capital to that place.

Tughlak regime

During this period, the empire had been divided into 23 provinces, each of which had a governor over it. The governor was assisted by a military co-adjutor in charge of the provincial army and a *Kotwal* who policed the capital of the province. The Tughlak regime, which lasted for not more than 20 years (1327-1347), left behind some marks on the administrative system in the Dekkan. The whole system of government of the Bahmanis was to a large extent based on the system evolved by the Delhi Sultans even to the extent of the nomenclature of a number of offices. As a matter of fact, Muhammad I, the law-giver of the Bahmanis, only re-organised the administration which had fallen into decay during the war of independence, and we do not find much of deviation from its principle till we reach the ministry of Mahmud Gawan towards the latter part of the fifteenth century.[67]

The power of the Sultan, however, was nowhere firmly established, except at Devagiri, as is evident from the number of revolts in various parts of the Dekkan in the following few years. In fact, the movement for the liberation of Dekkan may be said to have begun immediately after the departure of the Sultan to Delhi in 1329, after appointment of Kutlugh Khan as the viceroy of the Dekkan. So far as our region is concerned, in about 1331, one Somadeva, who claimed descent from the ancient Chalukya family and became the progenitor of the later Aravidu dynasty of Vijayanagara, led the Hindus of the western Telugu country in revolt against their Muslim overlord Malik Muhammad, governor of Kampili. He seized the forts of Anegundi, Raichur and Mudgal. At the same time, the Hoysala king Ballala III also threw off his allegiance to Delhi and invaded the province of Kampili. The state of affairs made Malik Muhammad utterly helpless.

The decade that followed saw the beginning of the great Hindu kingdom of Vijayanagara, which played a decisive role in the history of India. This powerful kingdom founded by Hukka or Harihara and Bukka and their three brothers set itself to the task of defending the ancient Hindu culture against the onslaughts of Muslims. Sultan Muhammad, who was pre-occupied with other troubles at this time, could not counteract this rebellious activity. By this time, four out of six provinces of the Dekkan had already attained independence from Delhi Sultanate. When in 1347, Zafar Khan, the leader of another political revolution, founded the Bahmani kingdom at Gulbarga, the Dekkan was entirely lost for the Sultanate of Delhi.

Bahmani and Vijayanagara kingdoms

Writing about 'Raichur, a bone of contention'[68] Major Haig rightly observes that the history of the Raichur doab is the history of the struggle between the Muhammadan (*i.e.*, the Bahmani) kingdom of the Deccan and the Hindu (*i.e.*, the Vijayanagara) kingdom of the Peninsula for supremacy in Southern India.[69] The region comprising this district has changed hands many times during this period and its history is often so confusing that at times one will be at a loss to know under whom it was during a particular year.

The foundation of the Bahmani kingdom was the immediate result of the policy of repression followed by Sultan Muhammad Tughlak. He introduced the system of tax-farming and collected taxes with unnecessary violence. This caused discontent, and rebellions broke out. The Sultan made matters worse by declaring war against an entire class of subordinates, the 'amirs of the hundred' or centurions in 1344. Early next year, the rebels gathered at Daulatabad (former Devagiri) and were joined by the centurions of the Dekkan. Together, they easily overpowered the governor of Daulatabad and instituted one among themselves on the throne of the Dekkan under the title Nasir-ud-din Ismail Shah. An imperial army led by Muhammad himself, who was in the south at this time, made its appearance on the scene from Broach, defeated the rebels and shut them up in the citadel of Daulatabad. Some of them, however, escaped and fled to Gulbarga under the leadership of Hasan Gangu *alias* Zafar Khan. The Sultan reduced Daulatabad, but was soon called away to Gujarat, where another rebellion had broken out. A general was sent to Gulbarga against the centurions who had escaped, but could do nothing. Taking advantage of the Sultan's absence from Daulatabad, Zafar Khan, with the help of Kapaya Nayaka of Warangal, attacked Bidar and occupied it by driving away its Muslim governor. As he approached Daulatabad, the royal troops gave up the siege and retired to Malva, as a result of which Zafar Khan took the fort easily. The aged Nasir-ud-din Shah then readily abdicated the throne and Zafar Khan was proclaimed the

ruler of the Dekkan on the 3rd August 1347, under the name Sultan Abul Muzaffar Ala-ud-din Bahman Shah.

Ala-ud-din I (1347-1358) made Gulbarga his capital and the new kingdom included Gulbarga, Bidar, Berar, etc. He spent most of his time waging wars or conducting negotiations calculated to extend his territories. By a judicious mixture of force and clemency, Ala-ud-din made a number of additions within the span of a few years. As early as 1349, he attacked the territory of Vijayanagara and plundered the northern parts of the kingdom. Five years later, as a result of an understanding with the Sultan of Madural he attacked Vijayanagara a second time. While Muslim accounts claim for him the conquest of all the area upto the Tungabhadra, Hindu sources say that Harihara I (1336-1357) inflicted a defeat on him. In view of the demand for the Raichur doab by the next Vijayanagara king in 1361, which will be referred to later, it seems that the region formed part of the Bahmani kingdom during the reign of Ala-ud-din I. At the time of his death, Ala-ud-din had become the master of an extensive kingdom, extending to the sea on the west and as far as Bhongir on the east and bounded by the Penganga and the Krishna (or the Tungabhadra) on the north and the south. Ala-ud-din divided his dominions into four large divisions. Ahsanabad-Gulbarga, along with Raichur and Mudgal, being one of them.

Muhammad-I

Ala-ud-din was succeeded by his eldest son Muhammad I (1358-1375), a diligent and methodical administrator, many of whose institutions continued to exist long after him. He waged wars with the rulers of Warangal and Vijayanagara. At this time, Bukka I (1344-1377) was on the throne at Vijayanagara. By issuing large quantities of gold coins, Muhammad I earned the resentment of the rulers of Telangana and Vijayanagara, who took it for an assertion of supremacy on his part. They, therefore, induced the bankers of the area to hoard and melt down the new coins. It is said that then the Sultan caused the massacre of all the local Hindu bankers and replaced them by Khatris from the north.[70] After this, Kapaya Nayaka of Warangal demanded from him the restoration of the fortress of Kaulas and Bukka of Vijayanagara demanded the return of the Raichur doab and threatened to join Delhi against him. Muhammad detained the messengers for eighteen months, during which time he completed his preparations to defy the demand. He then sent haughty answers, calling them his vassals. Kapaya Nayaka immediately attacked Kaulas with the help of Vijayanagara. A series of battles were fought, which ended in the disastrous defeat of Kapaya Nayaka. Encouraged by this success, the Sultan issued a draft on the Vijayanagara treasury for payments to be made to 300 musicians and dancers from Delhi, being pleased by their performance at the wedding feast of his son Mujahid.[71] This

was certainly a rash order made by the Sultan when he grew merry in his cups and regarded even by his minister Malik Saif-ud-din Ghori as a drunken boast. But it is said that he had done it seriously, for, the minister is said to have been asked the next day whether the draft had been made out and was compelled to offer excuses for his 'negligence'.[72] Whatever it may be, this was too much for the Raya of Vijayanagara, who is said to have paraded the messenger on an ass in his city and greatly incensed by the insult, the Raya crossed the Tungabhadra with a large army and seized Mudgal. Muhammad got wild at this and started against Bukka, though with only a small force. Bukka withdrew to Adoni with his cavalry, leaving the infantry to face the enemy. Muhammad proceeded plundering the country and killing the defenceless villagers. He retired to Mudgal for the rains and marched towards Adoni early in 1367. A battle took place at Kauthal and the Bahmani army gained the victory, thanks to its guns[73] and cavalry, the Vijayanagara artillery not coming into play in time. After this defeat, Bukka had recourse to guerilla warfare for about three months and finally shut himself up in his capital. Not having strength enough to attack the vast city, Muhammad also feigned sickness and retreated. Bukka's venture to attack him at this juncture also failed, as Muhammad suddenly took to the promiscuous slaughter of the inhabitants of the country and proclaimed his intention of not stopping until the draft was honoured by the Raja of Vijayanagara.

Indiscriminate slaughter

Moved by the endless and indiscriminate slaughter caused by the Sultan, Bukka consented to the demand and the war was ended. Both the parties were so shocked by the dimensions of the slaughter that they entered into an agreement to spare non-combatants in future wars. Though such agreements were not adhered to always, it may be said that this agreement did much to mitigate the horrors of the perpetual struggles between the two States. The musicians, who, in fact, were the cause of all this, are also said to have had something to say in the matter. It is said that after begging the Sultan's pardon, they suggested that the massacres committed by him were entirely against the precepts of Islam and that such things were not allowed, far less enjoined, by it and the king is said to have been greatly touched by this appeal.

Muhammad was succeeded by his eldest son Mujahid (1375-1378). At the time of his accession, some of the forts in the Raichur doab were held by Bukka, while others were with the Bahmanis, Raichur and Mudgal being with the latter. Immediately after coming to the throne, Mujahid provoked a quarrel with Vijayanagara, complaining of the encroachment of the Hindus on the doab. According to him, the Tungabhadra was the northern boundary of the Hindu kingdom. Bukka's reply

to this was that the Krishna was legitimately his northern boundary and he demanded the surrender of Raichur and Mudgal. These conflicting claims could only be decided in the battle-field. Mujahid made a beginning by invading the Vijayanagara kingdom. Bukka adopted the plan of wearing out his enemy, avoided a regular battle and finally retired into his capital. Mujahid pursued him and besieged the city; but he could not do anything more than taking its outer defences. On his return march, he made a futile attempt to take Adoni. Mujahid blamed his uncle, Daud Khan, for his failure at Vijayanagara.

Daud Khan, in retaliation, conspired against Mujahid, got him murdered on the 16th April 1378 and proclaimed himself as king. Within a month, however, Mujahid's sister saw to it that Daud Khan was murdered. Ultimately Muhammad II (1378-1397), son of the youngest son of Ala-ud-din I, became the king. When there was this confusion in the Bahmani capital, at Vijayanagara, Bukka I was succeeded by his son Harihara II (1377-1404), who laid siege to Raichur unsuccessfully. The accession of Muhammad II to the throne of Gulbarga in 1378 may be said to have brought a welcome lull in the continuous hostilities between the two kingdoms. This king was essentially a lover of peace and learning. He caused a number of schools to be opened throughout his kingdom and when there was a famine in his reign, he organised efficient relief measures. He died of a fever in April 1397.

Muhammad II was succeeded by his elder son, Ghiyas-ud-din, a youth of seventeen. He was, however, dethroned within two months by a Turkish slave, Tughalchin, who raised to the throne Shams-ud-din Daud, Ghiyas-ud-din's younger half-brother, and made himself regent. But Firoz and his brother Ahmad, grandsons of Ala-ud-din I, succeeded in overpowering Tughalchin and Daud in November 1397. Firoz ultimately became king under the title Taj-ud-din Firoz Shah.

Firoz Shah

Firoz (1397-1422) had a vigorous body and a keen mind. He is said to have been the most learned of all the Bahmani rulers. He was reputed to be knowing several languages. He built a new city Firozabad on the Bhima, wherein he set up a harem of 800 women of various nationalities. Firoz made his brother Ahmad his chief minister and regulated the administration efficiently. He also appointed some Hindus to important posts. The region of the Raichur doab, which had enjoyed a fairly long spell of peace during the reign of Muhammad II, was disturbed twice in the regime of this king in 1398-99 and 1406-7. In 1398, Harihara II started operations for recovery of the doab with a vast but ill-organised army. Firoz marched against him with only 12,000 horse. As Harihara had pitched his camp on the south bank of the Krishna, Firoz, who came upto the north

bank of the river, hesitated to cross the river in the face of the enemy. At this time, one Quazi Siraj-ud-din suggested a stratagem and came forward to carry it out himself. He and a number of his friends entered into the enemy camp, disguised as a company of strolling performers. After a few days, when they were performing before Harihara's son, they suddenly fell upon him and killed him on the spot. There was much confusion in the Hindu camp, with the result that there was nobody to oppose Firoz who crossed the river easily. Harihara fled to Vijayanagara, pursued by Firoz; the latter took a large number of prisoners who were released later on payment of a big ransom. The war ended. Firoz now separated the Raichur doab from the Gulbarga province and appointed one Fulad Khan as its first military governor.

Mudgal girl episode

In 1406, the peace of the district was disturbed by reason of a young lady. At this time, Harihara II had been succeeded by his son Devaraya I (1406-1422). It is stated that when Devaraya failed to secure the hand of this beautiful girl, who was the daughter of a goldsmith of Mudgal,[74] he tried to secure her by sending troops into the neighbourhood of Mudgal, which formed a part of the Raichur doab, Firoz Shah's tenure of which had been, however, recognised by a treaty concluded at the close of the last war. This act provoked Firoz Shah, who invaded Vijayanagara and attacked the city. The attempt, however, failed and the Bahmani army was defeated. Being wounded himself, Firoz withdrew to a fortified camp outside the city. He then sent his lieutenants in different directions to ravage the country round about and marched himself towards Adoni. Ultimately, Devaraya had to make peace on the terms laid down by Firoz, which included the "gift of a daughter of his" to Firoz, the surrender of the fort and district of Bankapur by way of 'dowry' and the payment of a large sum of money, a huge quantity of pearls and 50 elephants. The marriage proper was celebrated with great pomp; but at last as Devaraya did not accompany Firoz far enough out of the city when he left it, he parted in anger. The Mudgal girl, whose charms had brought about the conflict was given in marriage to Hasan Khan, son of Firoz Shah.

There was yet another war between the Bahmanis and Vijayanagara during the reign of Firoz, during the last years of his regime. In 1418, the Sultan, now nearing 70, laid siege to Pangal, which was at this time with Vijayanagara. The siege went on for two years, at the end of which disease began to decimate the ranks of the Bahmani forces. Vijayanagara had complete victory on this occasion and Firoz had to retreat leaving the southern and the eastern boundaries of his kingdom in the occupation of Vijayanagara troops. Rudely shaken by his defeat, Firoz henceforth became a broken man. He spent the rest of his life in works of piety, leaving the affairs of the state in the hands of two of his favourite slaves. The last months of

1422 saw the end of both Firoz who gave place to his brother Sihab-ud-din Ahmad I (1422-1436), and Devaraya who was followed by his brother Viravijayaraya (1422-1426).

Ahmad I proceeded against Vijayaraya to avenge the disasters of the last war and it should be said that he completely succeeded in doing so; for, a battle fought on the banks of the Tungabhadra ended in the most ruthless devastations of Vijayanagara country. Indiscriminate slaughter, enslavement of civil population, destruction of temples and killing of cows are said to have been the special features of this campaign. The destruction was stopped only when Vijayaraya agreed to pay a large sum as 'arrears of tribute'. It is said that among the prisoners carried away by the Sultan were two able Brahmin youths who became Muslims, one of whom later became the first independent Sultan of Berar and the other the father of the founder of the Nizam Shahi line of Ahmadnagar.[75]

Ala-ud-din-II

Very early in the reign of the next Bahmani king, Ala-ud-din II (1436-1458), a rebellion broke out in the Raichur doab. The king's younger brother, Muhammad, had been sent to Vijayanagara to recover the tribute which was in arrears for five years. His army invaded the Vijayanagara territories and began the usual work of indiscriminate slaughter. Devaraya II (1424-1446) who was then king of Vijayanagara at once paid the amount and the invaders withdrew to Mudgal. While halting at this place, somebody told Muhammad that his father's intention had been to divide the kingdom equally between his two eldest sons and instigated him to claim half the kingdom from his brother. The young man who had his head already turned by his success against Devaraya, listened to this evil counsel and did accordingly. When negotiations failed, he raised a large army with the help of the money he had from Vijayanagara and succeeded in taking some forts including Raichur and Mudgal. But he was defeated by the king in an encounter that followed and fled from the field. He took refuge in the forests, where he lurked until he received a message of forgiveness from the king. He then returned to the court and was made governor of Raichur. (There is, however, an inscription in Dr. P. B. Desai's collection,[76] which refers to the reign of Devaraya II and which comes from Mudgal. According to this inscription, which is dated the 23rd November 1436, Devaraya had placed his subordinate Varadanna Nayaka in charge of the administration of Mudgal-nadu. It follows from this that the region was in his authority for some time prior to this date. This authentic information is in contrast with the above account which is based on Muslim sources).

Later on in his reign, Ala-ud-din II was engaged in warfare with his father-in-law, Nasir Khan, Sultan of Khandesh.[77] Devaraya II, who had by this time, completely reorganised his

army,[78] imagined himself strong enough to defy the Bahmani king and, taking advantage of this trouble in the north, invaded the Raichur doab in 1443 and captured Mudgal, besieged Raichur and Bankapur and laid waste the country upto Bijapur and Sagar. On the approach of Ala-ud-din, however, he withdrew to Mudgal, and Malik-ut-tujjar, the Bahmani general, was able to raise the sieges of Raichur and Bankapur. Three battles were fought between the two parties. In the first, the Vijayanagara had the victory, while in the second the Bahmanis won the day; the success was indecisive in both the cases. In the third battle, Devaraya's elder son was killed and his troops driven back to Mudgal. But the Vijayanagara army managed to capture and imprison two of Ala-ud-din's principal nobles and a few of his troops. When, however, the Sultan sent word that the lives of 200,000 of Hindus would be the price of these officers, Devaraya agreed to make peace and to pay the 'tribute' regularly in future. He returned to his dominions and regularly remitted the stipulated tribute, and peace reigned in the Raichur doab, for a long period, until the Bahmani dynasty had ceased to be a force to be reckoned with.

Muhammad-III

Ala-ud-din II died in 1458. He had, before his death, designated his eldest son Humayun as his successor. This Humayun (1458–1461) was notorious for his cruelty, and the savage deeds that marked his reign earned for him the title of Zalim or 'tyrant'. Fortunately, the Raichur doab was calm and quiet during the reign of this king, on whose death as a result of stabbing by his own servants who were tired of his inhuman cruelties, people heaved a sigh of relief. Humayun was followed by his sons, Nizam Shah (1461–1463) and, on his death, Muhammad III (1463–1482), whose regimes were also eventless, so far as the Raichur district is concerned. But though this period was eventless in the sense that the peace of the district was not disturbed in any manner, there took place one important event in the reign of Muhammad III, which determined the destiny of the Raichur doab on the dissolution of the Bahmani kingdom. This was the sub-division of the four administrative units of the kingdom into eight, by his reputed minister Khwaja Mahmud Gawan. Under this arrangement the old province of Gulbarga was divided into two parts, Gulbarga and Bijapur, the Raichur doab forming part of the latter. The province of Bijapur was first given to Mahmud Gawan, who was murdered by order of the king in 1481, in consequence of the machinations of those who were envious of his ever-rising position and opposed to his far-reaching reforms. After his death, the Government of Bijapur was given to Yusuf Adil Khan, the Turk, the future founder of the Adil Shahi dynasty of Bijapur. Muhammad III died shortly afterwards in the same year stricken with remorse for his share in the death of his faithful minister. He was succeeded by his

twelve-year old son Mahmud (1482-1518), a weakling who was king only in name.

During the reign of Mahmud Shah, all real power in the kingdom passed into the hands of the great nobles. Malik Hasan and his son Malik Ahmad (the future founder of the Nizam Shahi dynasty of Ahmadnagar), governor of Daulatabad, were all in all and the king was a helpless prisoner in their hands. This Malik Hasan, who was the arch enemy of Mahmud Gawan and who, by his machinations, brought about his death, however, met with a fitting end, similar to that of Mahmud Gawan, in 1486. Everybody was so much disgusted with the affairs of the kingdom that next year an attempt was made by the Dekkanis to dethrone the king, but failed by the intervention of the foreign troops.

At last, in 1490, at the suggestion of Malik Ahmad, Nizam-ul-mulk, the late Malik Hasan's son, Yusuf Adil Khan of Bijapur and Fathulla Imad-ul-mulk of Berar joined him in assuming royal titles and declaring their independence from the suzerainty of Bidar. This example was followed later by Qutb-ul-mulk of Golkonda (1512) and Barid-ul-mulk of Bidar (1526) as well. This, then, was the origin of the five Dekkan Sultanates—Nizam Shahi of Ahmadnagar, Adil Shahi of Bijapur, Imad Shahi of Berar, Qutb Shahi of Golkonda and Barid Shahi of Bidar.

Narasa Nayaka

Kasim Barid, who was now the prime minister of Bidar, tried to bring the provincial governors under control. He incited Narasa Nayaka, the regent of Vijayanagara, to attack Yusuf Adil Khan by invading the Raichur doab. Narasa Nayaka did so and captured Raichur and Mudgal. Yusuf, in retaliation, marched against Kasim Barid himself. In the battle that followed, Kasim Barid was completely routed. Not content with this victory, Yusuf proceeded against the Vijayanagara forces which had entrenched themselves in the doab, and fought a pitched battle with them. He was at first defeated and forced to take refuge in the fortress of Manvi. Then, however, he pretended submission and invited Narasa Nayaka to a peace conference, where he treacherously attacked him and his followers. The Vijayanagara army fled and gave him a victory. It is probable that these two forts were taken by him in the name of the Bahmani Sultan. For, immediately after this he is said to have sent costly presents to the Sultan of Bidar.[79] But the Raichur doab remained part of the Vijayanagara empire till 1502 when, as a result of a *jehad* undertaken by the Bahmani nobles, it passed into the hands of Yusuf Adil Khan.

Henceforward, the future of the Raichur doab was closely connected with the Adil Shahi dynasty of Bijapur and had nothing to do with the Bahmanis of Bidar. We need not, therefore, continue further the history of the latter which continued to exist

upto 1527. Mahmud was succeeded by his four sons: Ahmad (1518-1521), Ala-ud-din (1521), deposed, imprisoned and put to death for his attempt to get free from the control of Ali Barid, Wali Ullah (1521-1524) who also met the same fate, and Kalim Ullah (1524-1527).

Throughout the Bahmani regime, the life in the Raichur doab was hard and precarious. Majority of the Bahmani rulers were drunkards surrounded by informers and self-seekers. Faction and party strife dominated court life, especially in the latter half of the dynasty's rule. Few of the kings had genuine sympathy for the subjects, who were mostly Hindus. About the lot of people, the Russian merchant Athanasius Nikitin who lived in Bidar for some time (1470-1474) says: "The land is overstocked with people; but those in the country are very miserable, whilst the nobles are extremely opulent and delight in luxury......" The army and its leaders often sucked the country dry. In addition to these general miseries, the Raichur doab suffered frequently from the wars with Vijayanagara kingdom, which were marked by sickening horrors. Numbers of foreigners—Turks, Persians, Arabs and Mughals—came for trade or in search of office and settled in the country, marrying local women.

Bijapur and Vijayanagara kingdoms

We have seen above how the Adil Shahi dynasty had its birth in 1490. In connection with the breaking away of the three nobles from the Bahmani kingdom in that year, it is said while Malik Ahmad's motive was almost certainly disloyalty to the Sultan who had ordered the murder of his father, the other two declared independence, because they could not tolerate a king who allowed himself to be swayed by any ambitious minister that would be in his favour at the moment.[80] In view of this, we may say that though Yusuf Adil Khan had become independent for all practical purposes in 1490, he continued to have respect for the Bidar throne. In fact, it has been asserted on epigraphical evidence that the Adil Shahs had not assumed royal titles till 941 H (A.D. 1535).[81] This view, it is said, also finds support in the numismatic evidence; for, coins of the first four Adil Shahi kings have not been discovered.

Now, before touching upon the history of the Adil Shahi dynasty, we can conveniently see what had happened at Vijayanagara in the meanwhile. In 1485, the then king of the Sangama dynasty, Virupaksha II (1465-1485), was murdered by his eldest son who, however, declined the throne which, therefore, went to his younger brother, Praudha Devaraya. But this king took to an easy life and neglected the affairs of the state. Saluva Narasimha of Chandragiri, who was the most prominent among the provincial governors, saw in this a great danger for the empire and by putting an end to the rule by the old dynasty, assumed the imperial titles himself, thus bringing about a change of dynasty

from Sangama to Saluva. Undoubtedly, by doing so, he saved the empire from disruption. He died in 1491, leaving his two young sons to the care of his loyal general Narasa Nayaka, the son of Tuluva Ishvara. Tuluva Narasa Nayaka first made the elder prince Saluva Timmabhupa king; but he was soon murdered by a rival of Tuluva Narasa Nayaka, after which the crown descended to the younger prince Saluva Immadi Narasimha (1491–1505). Of course, Tuluva Narasa Nayaka (1491–1503) retained all power in his own hands as regent and even assumed a royal style. It was during his regency that the battle of 1493 with Bijapur took place. When Tuluva Narasa Nayaka died in 1503, he could truthfully claim to have continued the work of his master. He had both extended the dominions and raised the prestige of the empire. After his death, his place was taken by his eldest son Tuluva Vira-Narasimha (1505-1509), the lawful sovereign first being kept under tutelage and finally assassinated in 1505. Thus was inaugurated the third or the Tuluva dynasty of Vijayanagara. Yusuf Adil Khan came in conflict with Vijayanagara during the reign of this king, but was forced to retire and was finally defeated. Tuluva Vira-Narasimha was succeeded by the famous Krishnadeva Raya (1509–1529), whose reign was " the period of Vijayanagara's greatest success, when its armies were everywhere victorious, and the city was most prosperous."

Krishnadeva Raya

Yusuf Adil Khan, the founder of the Bijapur dynasty, reigned from 1490 to 1510. Immediately after the death of Yusuf Adil Khan who was succeeded by his son Ismail Adil Khan (1510-1534) and when some difference had arisen between the Bijapur and the Bahmani Sultans, Krishnadeva Raya invaded the Raichur doab and took Raichur fort. At Bijapur, Ismail Adil Khan was only a nominal ruler, his regent Kamal Khan being all-powerful. Kamal Khan knew well that Krishnadeva Raya was on friendly terms with the Portuguese who were at this time a growing force on the western coast and so the opposition from Bijapur to Krishnadeva Raya's invasion was very feeble. There was still more confusion in Bijapur when in May 1511 Kamal Khan was murdered by a hireling employed by Ismail's mother and thus Krishnadeva Raya was entirely free to pursue his designs. After capturing Raichur he marched to Gulbarga, defeated Amir Barid, the minister and gaoler of the Bahmani king Mahmud and took the city. From there, he marched to Bidar, captured it after a short siege, released Mahmud and assumed the title 'establisher of the Yavana kingdom'.

Later, when Krishnadeva Raya was busy with his Orissa campaign, Ismail Adil Khan recaptured Raichur. Krishnadeva Raya set out on a campaign for its recovery in 1520. Determined to try conclusions once for all with the Adil Shah, Krishnadeva Raya, says Nuniz, marched against him with an army consisting " of about a million of men, if the camp-followers be included and

over 500 elephants". He pitched his camp to the east of Raichur and began a regular siege of the fortress. Ismail also came to its relief with heavy contingents of cavalry and advanced to within nine miles of Raichur, where he entrenched himself. The decisive battle was joined on the morning of the 19th May 1520. It opened with an attack by the Vijayanagara troops, which drove Adil Shah's army back to the trenches. At this moment, the Bijapur artillery came into play and wrought havoc among the close ranks of the Vijayanagara army which fell back and were charged by the enemy . Krishnadeva Raya, who was in command of the second line, now came forth and ordered a forward march of the remaining forces. Their strong onslaught overcame and scattered the ranks of the Adil Shah's forces, which were relentlessly pursued right upto the Krishna river. There was great spoil and the result was decisive—the Hindus had a brilliant victory. The Muslim camp was seized and the king himself barely escaped on an elephant. "The Sultan of Bijapur thenceforth cherished a wholesome dread of Krishnadeva Raya and did not venture to renew the contest during his lifetime". Krishnadeva Raya then returned to Raichur which he shortly afterwards recaptured. Krishnadeva Raya's success this time was to a great extent due to the assistance rendered by some Portuguese soldiers under the leadership of Christovao de Figueiredo, who was specially honoured by the king in the next Mahanavami festival at the capital. This resounding success against the Adil Shah is said to have made Krishnadeva Raya rather haughty; when he later received an ambassador from Bijapur, he is said to have kept him in waiting at Vijayanagara for over a month and then sent word that if the Adil Shah would come to him and kiss his feet in obeisance, he would restore him his lands and fortresses.

Asad Khan

Next, the machinations of Asad Khan, who had been sent to Vijayanagara by Ismail Khan to conclude a treaty, led Krishnadeva Raya into another campaign against Bijapur in 1523. According to Asad Khan's undertaking, the Adil Khan or his mother was to meet Krishnadeva Raya at some place on the northern frontier of the kingdom. As Krishnadeva Raya did not find any of them at the appointed place, he thought of teaching them a lesson, and marched on Gulbarga and razed its fortress to the ground. He also led his army to Bijapur, which he occupied for a time and left it sadly injured. At Gulbarga, he liberated the three sons of Mahmud Shah Bahmani, made the eldest of them Sultan and brought the other two to Vijayanagara where he treated them with consideration.

Krishnadeva Raya died in 1529 and was succeeded by Achyutaraya (1530-1542), his half-brother, whom Krishnadeva Raya himself had chosen in preference to his own infant son. The emperor's death was the signal for all the enemies of

Vijayanagara to renew their attacks on the empire. Ismail Adil Khan invaded the Raichur doab and seized Raichur and Mudgal, before Achyutaraya could do anything to prevent it. After four years, Bijapur was paid in its own coin by Vijayanagara. In 1534, immediately after the death of Ismail Adil Khan, there was confusion at Bijapur when the nobility rose against the unpopular and inefficient prince Mallu Adil Khan. Taking advantage of this situation, Achyutaraya invaded the Raichur doab and subdued the Bijapur country as far north as the Krishna and during the period from this time to the downfall of the Vijayanagara empire in 1565, the doab appears to have been a part of the Vijayanagara kingdom continuously.83

After a reign of six months, Mallu Adil Khan was dethroned and blinded, and his younger brother was raised to the throne under the title of Ibrahim Adil Shah (1534-1557). In about 1536, Ibrahim took advantage of the disturbed condition of Vijayanagara and sent an army into the doab: but this was repelled by the Raya's brother Venkata. There were one or two other minor conflicts between Bijapur and Vijayanagara during the reign of Ibrahim; but they need not concern us here as the Raichur doab was little affected by them.

Aliya Ramaraya

In Vijayanagara, Ramaraya (of the Aravidu dynasty), son-in-law of Krishnadeva Raya, was now gradually gaining power. Achyuta, who died in 1542, was, after some conflict, succeeded by his nephew Sadashiva in 1543. But the real power was in the hands of Ramaraya (1543-1565), who assumed also royal titles.

In Bijapur, Ibrahim died in 1557 and was succeeded by his son Ali Adil Shah (1557-1580). The reign of this king began with unusually friendly relations with Vijayanagara. But this was not to last long. For, it was during the reign of this king that a confederacy of the Muslim kings of the Dekkan, including the Adil Shah, brought about the downfall of Ramaraya and of the Vijayanagara kingdom. Without going into the details of the history of this period, suffice it to say that Ramaraya had success in every direction which turned his head and made him haughty. He interfered in the relations between the Muslim kingdoms and each time he did so, they could discern his stern attitude towards them, which they could not tolerate.

First Ali made an alliance with the king of Ahmadnagar, which was later joined by the Sultans of Golkonda and Berar. It was not difficult to find cause for the quarrel with Vijayanagara. Ali demanded the restoration of Bagalkot and the Raichur doab. His demand was met with a stern refusal and his ambassador was driven out from Vijayanagara. The confederacy of the Sultans, which was only waiting for such an opportunity, set out on its expedition against Ramaraya and pitched its tents near Talikote,

a large village 40 miles east of Bijapur and 25 miles north of the Krishna. The actual battle took place near Rakshasa-Tangadgi and the exact date of it was the 23rd January 1565. Success in the beginning leaned towards Vijayanagara. But the war ended in a great victory for the confederacy of Muslim kings and in the death of Ramaraya and the destruction of Vijayanagara. This decided the future of the Raichur doab which was hitherto a ceaseless bone of contention.

But though the position of the doab in general was decided, the fortresses of Raichur and Mudgal held out for some time under the Hindu commanders. Three generals, Mustafa-Khan of Golkonda, Inayatullah of Ahmadnagar and Kiswar Khan of Bijapur were sent to take them. The fortresses surrendered without much resistance. Mustafa-Khan, the leader of the expedition, then made over the keys to Kiswar Khan, regarding the doab as part of the Adil Shahi dominions. Hussain Nizam Shah of Ahmadnagar, however, considered that as the leader of the confederacy, he should have been consulted in the matter, and called Ibrahim Kutub Shah to account for his general's action. Ibrahim did not agree with him. This incident ultimately rekindled the members of the strife between Bijapur and Ahmadnagar. With the results of this we are not concerned, for they did not affect the Raichur doab.

Ali Adil Shah II

With these final touches, the Sultans of Bijapur were now at length confirmed in the possession of the Raichur doab, the only power which had gone near depriving them of it being almost destroyed. The doab was now undisturbed from 1565 to 1680, the last year of the Adil Shahi dynasty, with a single minor disturbance in the middle. Ali Adil Shah was followed by Ibrahim II (1580-1626) and Muhammad (1626-1656) whose reigns were eventless so far as the Raichur doab is concerned. It was during the reign of the next king Ali Adil Shah II (1656-1672) that the minor disturbance referred to above occurred. In 1662, an African amir named Siddi Jauhar, and entitled Salabat Khan, rebelled in Karnul and Ali Adil Shah II marched through the doab to punish him. Siddi Jauhar urged the commander of Mudgal fort to oppose the advance of the royal forces promising him assistance. But the commandant, who could not be won over so easily, received the king with all honours. The royal forces encountered the rebel in the neighbourhood of Mudgal. He was defeated and fled to Raichur. The commander of the Raichur fort, who was related to Siddi Jauhar, received him well and assured him that the gates of the fort would be closed against Ali Adil Shah. But the loyal officers in the garrison rose against him, imprisoned him and carried the keys of the fort to the king. The rebel, having no more shelter, fled beyond the Tungabhadra and his troops were defeated.

Ali Adil Shah II was succeeded by his son Sikandar (1672-1686), who was the last ruler of the dynasty. At the time of accession, he was just a boy of five years and the affairs of the State were looked into by powerful generals who were always at war with each other. The internal jealousies had reached such a pitch that one of the leaders, namely Khawas Khan, had even opened traitrous negotiations with the Mughal viceroy in 1675. The treason was discovered and he was killed by the people. When Bijapur was in such a condition, Aurangzeb started his campaign against it in 1685. The parties fortunately closed their differences and faced the enemy unitedly and Bijapur stood the siege for a whole year. The defence could not continue further owing to shortage of supplies in the fort and Bijapur capitulated on the 18th October 1686. From this day, the entire Bijapur kingdom, and therefore, the Raichur doab, became a part of the vast Mughal empire.

A number of inscriptions of Adil Shahi dynasty have been discovered at Raichur. Ten of them can now be seen in the Hyderabad Archaeological Museum while others are *in situ* at Raichur. They range from 912 H (A.D. 1506) to 1081 H, 16 years earlier than the date of extinction of the family. Eight inscriptions record the building of five bastions in the Raichur fort.

The Koppal area was given as a fief to one Abdur Rahim, also called Bahlol III. He had put Hussain Mian, a fellow clansman of his, in charge of this jagir. Kuknur was the headquarters of this Hussain Mian. Under orders of Shivaji, his general Hambir Rao attacked Koppal and in a battle waged in January 1677 near Yelburga, Hussain Mian suffered a defeat and later, the fort of Koppal was ceded to Shivaji (*House of Shivaji* by Jadunath Sarkar—third edition, pp. 96-97).

Mughals

After the Bijapur kingdom was annexed by the Mughals, the Bedars seized the fort of Raichur. But it was recaptured by the Mughals in November 1689. One Ruhulla Khan is said to have been appointed Subedar of the new province of Bijapur. Shortly after his appointment, this officer took the field against those who had still held out, the commander of the Raichur fort being one of these. Raichur was still held by one of Sikandar's officers, but was taken by Ruhulla Khan without much difficulty. The Bijapur province of the Dekkan, which included Raichur, was under the Mughal emperor's Subedar at Hyderabad. But with the proclamation of independence by the Nizam in 1724, Bijapur, along with Raichur, became a part of the Nizam's kingdom.

Asaf Jahi dynasty

The Asaf Jahi dynasty of Hyderabad was founded by Nizam-ul-Mulk (1724-1748), the Mughal Subedar of the Dekkan, and its history as an independent unit begins from 1724. This

Mughal nobleman whose personal name was Chin Kilic Khan, was originally appointed Subedar of the Dekkan in 1713. He was transferred to Malva in 1724. Growing suspicious of the Sayyid brothers, who were then the ministers of the Mughal emperor, he decided to strengthen his position. He soon occupied the Dekkan districts and established himself at Aurangabad. The Mughal emperor, unable to check him, re-appointed him Subedar of the Dekkan and conferred upon him the title of Asaf Jah. Nizam-ul-Mulk began to function as an independent ruler from this time onwards. After his death in 1748, there was a contest for succession between his second son Nasir Jung and his sister's son Muzaffar Jung. This dispute between the uncle and the nephew brought the English and the French on to the scene. Dupleix, the French governor of Pondicherry, who was entertaining wild ambitions of building an Indo-French empire and waiting for an opportunity to put his plans into execution, came to the help of Muzaffar Jung, and the English, who became apprehensive of the growing power of the French, allied themselves with Nasir Jung. Muzaffar Jung proclaimed himself king. Nasir Jung marched to the south in 1750 and besieged the fort of Ginjee with the aid of the English. Very soon Muzaffar Jung, who was deserted by his allies, surrendered to his uncle who imprisoned him. A French contingent occupied Ginjee in the absence of the Nizam. Nasir Jung returned and laid siege to it. He was shot dead in the course of fighting. Muzaffar Jung marched to Pondicherry, where he was received warmly and proclaimed Nizam by Dupleix. The new Nizam expressed his gratitude by making Dupleix the Nawab of all the territory south of the Krishna, and agreed to be guided by him in all matters in the future. But, when the Nizam was going to Hyderabad with a strong body-guard of 200 Europeans and 2,000 sepoys, he was killed by the Nawab of Karnul. Bussy, the French officer who was accompanying the Nizam, proclaimed Salabat Jung (1751-1761), a brother of Nasir Jung, as the Nizam then and there and conducted him safely to Hyderabad.

Bussy

The new Nizam, who owed his elevation to Bussy, depended entirely upon the Frenchmen who dominated the Hyderabad politics of the time. War broke out between England and France in Europe and their representatives in India also started hostilities ; and Bussy, with all his forces, was summoned by the governor of Pondicherry in order to join the French attack on Madras. Meanwhile, Nizam Ali, another brother of Nasir Jung, rebelled and the Nizam, who could not do anything without external help, concluded a treaty with the English in May 1759. This treaty marks the end of French influence in Hyderabad and the beginning of English influence.

With all this, the Nizam was obliged to make Nizam Ali the prime minister, who ultimately deposed Salabat Jung in 1761 and

became the Nizam (1761-1803). In 1766, the Nizam entered into a treaty with them, ratifying the grant (by the Mughal emperor) of the Northern Circars and agreeing to receive a rent of nine lakhs a year and the English agreed to maintain a body of their troops for the Nizam's help. Tipu Sultan attacked parts of Raichur district and the area from Koppal to Manvi was under his control for a short period. In 1799, there were further conflicts between Nizam Ali and the Company, which finally ended in the British Government's appointing Mr. Holland as their nominee at Hyderabad. When war broke out between the Company and Tipu Sultan of Mysore, the Nizam helped the English and, at the conclusion of the war, obtained the Gurramkonda, Gooty and Doab districts. He helped the English during the last Mysore war and the second Maratha war also. The Nizam's position in relation to the English was finally settled in 1800, when he was drawn into the subsidiary alliances of Lord Wellesly. The English agreed to station eight battalions at Hyderabad for the use of the Nizam who agreed to cede to them the districts of Cuddapah, Kurnool, Anantapur and Bellary in lieu of the cost of maintenance of the army. This treaty made the Nizam a permanent subordinate of the English. Nizam Ali died in 1803 and was succeeded by his son Sikandar Jah. During the rule of this Nizam, the English became masters of large tracts of territory in the Dekkan and the two cessions of territories by the Nizam resulted in the Hyderabad State being surrounded by the territories of the Company. Nizam Sikandar Jah was not interested in administration and pursued a life of ease and pleasure and many persons took advantage of this situation and fully exploited it. Raja Chandu Lal was the prime minister of the State for nearly thirty years and Russell the Resident for a long time. Metcalfe, who was appointed Resident in 1820, recommended to the British Government the dismissal of Chandu Lal.

Afzal-ud-Daula

Sikandar Jah died in 1829 and was succeeded by his son Nasir-ud-Daula (1829-1857), who was said to be a humane and broad-minded ruler, much loved by his subjects. General Fraser, who was the Resident at Hyderabad during the regime of this Nizam, found that the army reorganised by Russell was a white elephant and recommended its abolition. He also brought about the resignation of Chandu Lal. In 1843, Salar Jung I became the prime minister of the State. The Nizam died in 1857; on his death bed, he is said to have told his son and successor, Afzal-ud-Daula, that as the British had always been friendly with the Nizams, so he should continue to be faithful to the British. Afzal-ud-Daula (1857-1869) followed his father's advice and all through the terrible days of the 'mutiny', he and his prime minister, Sir Salar Jung I, stood by the English. In 1858, for this act, the Nizam received thanks from the British Government and a new treaty was then signed by which Osmanabad and the Raichur doab districts were restored to the Nizam, the assigned

district of Berar 'being taken in trust' by the British Government for purposes specified in the treaty of 1853. In 1869, Afzal-ud-Daula was succeeded by his son Mir Mahboob Ali Khan, who was then only three years old. Sir Salar Jung I and Nawab Sams-ul-Umra were made co-regents and the advice of the British Resident was taken in all matters. The regency continued until 1884, when the Nizam was invested with full rights. In 1893, a cabinet and a legislative council were set up and in the latter council, for the first time in the annals of Hyderabad, a non-official element was allowed a voice in the work of administration. In 1911, the Nizam was succeeded by Mir Osman Ali Khan who endeavoured to improve the administration to meet the needs of the times. In the latter part of the year 1914, Salar Jung III resigned his office for reasons of health. For five years since then, the Nizam took the reins of government in his own hands and dealt with the heads of the various departments without any intermediary. During the Great War, he expressed the traditional loyalty of his House to the British Government by rendering it assistance in various ways—military, financial and material. One of his main achievements was complete Indianisation of the public services in the State. When this policy was implemented, it was said that "to-day not a single member of the Nizam's Government, nor a Secretary in any department is a non-Indian and the Heads of even such departments as Finance, Jail and Public Works are Indians—in many cases Hyderabadis".

Freedom struggle

Until recently, it had been the general belief that "it was Hyderabad and its ruler the Nizam that were the bulwark of strength to the British empire and the first war of Indian Independence (1857) failed because of the invaluable help rendered to it by the late Sir Salar Jung representing Hyderabad State". But now it is clear that while the latter half of this belief is fully true, the former half of it is only partially true. For, it was not Hyderabad, *i.e.*, its people and its ruler, but its ruler alone that formed the main body of strength to the British. The volume of investigation that has gone into the preparation of the account of '*The freedom struggle in Hyderabad*'[87] has amply shown that this part of the Dekkan also participated in the freedom struggle. There is enough evidence to show that there were in this State many patriots, both among the commoners and the zamindars and Rajas, who thought and acted in consonance with the spirit of the freedom struggle. Raichur district had also its own share in this struggle, which can be conveniently studied in two parts—pre-1857 and post-1857.

During the period from 1800 to 1857, several spontaneous attempts were made in the former Hyderabad State by men, who resented the British rule, to disrupt the power of the East India Company. In the Raichur district, in 1819, one Veerappa, a prominent zamindar of the Koppal area, rose in rebellion and

seized the forts of Koppal and Bahadur Banda. Soon, however, the fort was stormed by the British troops which moved against him both from the "southern Maratha country" and Hyderabad, and Veerappa was captured. From the papers concerned, it is clear that Veerappa gave a tough fight and Brigadier-General Pritzler had to continue his siege for five days. There were six killed and fifty-one wounded on the British side during this struggle. There was another outbreak in 1841; one Narsinga Rao, with a band of about 150 Arabs, attacked the fort of Badami in the Bijapur district, with a view to wresting it from the British. We need not go into the details of this assault, as the main stage of action was outside the Raichur district. The district under study comes into the picture due to the fact that it was at and round about Deodurg that the plot was organised. Since a month or two prior to the actual attack on Badami, General Fraser had been receiving reports that bodies of insurgents were gathering at Deodurg under an Arab settler known as Koharan. The Nizam's Government sent troops against them; but it appears that instead of marching against the insurgents, the Hyderabad troops placed themselves in friendly communication with them.[85]

It is clear from the papers now published that the people on their part participated in the upsurge and the Hindus and the Muslims had allied themselves in this struggle. In the circumstances, "the slightest sign from the head of the State would have raised their smouldering passions to open revolt, and thus doubled the strength of the mutineers by setting the country south of the Nerbudda on fire threatening alike Madras and Bombay and crippling the British resources at a most critical moment."

Bhimarao Nadagouda

What happened in Raichur district during the upsurge was a part of a general scheme of insurrections planned in the districts of Raichur, Gulbarga and parts of Bombay-Karnataka. The leader of this rising was Bhimarao Nadagouda of Mundargi, in the Dharwar district, who was formerly a Tahsildar at Bellary but had been dismissed from service for 'misconduct'. He, together with some of his friends, and in close collaboration with the chief of Nargund, formed a net-work of conspiracy in and in the neighbourhood of the Dharwar district. In the beginning, his activities were restricted to the Dharwar district. But in May 1858, he marched east and took possession of the Koppal fort, the inhabitants of which town welcomed him with open arms and joined him in his activities. When this became known, troops were sent from Dharwar, Bellary and Raichur. Immediately on his arrival at Koppal on 31st May 1858 in the evening, Major Hughes proceeded to surround the fort and a brisk fire by musketry was opened which was answered by the rebels for some time. Next morning, operations were commenced to storm the fort. The inmates gave a tough battle and did not yield to the enemy

until a breach was effected in the fort-wall and the brave Nadagouda and Kenchana Gouda fell fighting between the gateway of the fort. Many of the rebels died fighting and 150 were taken prisoners. The latter were all tried and about 75 of them were blown away by the guns. With the death of Bhimarao Nadagouda and the execution of his accomplices ended the insurrection in the Raichur district. He was a resourceful and enterprising man with a vast capacity for organisation; and many stories have gathered round his heroic exploits. Meadows Taylor observes in this connection: "Had the insurgent Bhima Rao confined himself to operations against villages he would have done much mischief, and roused the people, who seemed ripe for insurrection; but he got possession of Koppaldroog by a stratagem and found himself there in a trap."[86]

Political awakening

After the suppression of the freedom struggle in 1858, a feeling of despondency had enveloped the country and the people for sometime accepted the inevitable. Gradually, with the spread of modern education and amenities, a fresh intellectual ferment began. The activities of the branches of the Indian National Congress founded in 1885, in the neighbouring British-governed districts, had inevitably some impact on this district also.

The All-Karnataka Political Conference held at Dharwar in 1911 under the presidentship of Dr. Anne Besant considerably helped to awaken a political consciousness among the people of Raichur district as elsewhere in the North Karnataka region. But the movement in the real sense began in the district only after the Belgaum session of the Indian National Congress held in 1924 under the presidentship of Mahatma Gandhi. A Reading Room-*cum*-Khadi Prachara Kendra was started at Koppal sometime during 1916-17. One Putta Bhat was the active worker of this Kendra, which helped in spreading the message of constructive programme among the people in the area. In 1922, Sri R. B. Desai established the Vidyananda Gurukula at Kuknur with the assistance of one Ramaswamy. This national school helped in kindling a spirit of nationalism among the people.

By this time, Pandit Taranath had emerged as the moving spirit behind the nationalist movement in the region; having resigned from Government service, he established a national school called the Hamdard School at Raichur sometime in 1920-21. His stirring speeches and writings inspired many youths and he had a good following, and by strenuous work, brought about a new awakening among the people. In Raichur proper, Sri Adavirao Phadnavis, Sri R. G. Joshi, Ganadal Narayanappa, Veeranna Master, among others, helped the spread of political movement. During this period, mostly Koppal and Raichur were the active centres of nationalistic activities.

With the establishment of the Karnataka Sangha at Raichur in 1928, the movement gained a further strength. The Sangha, through the celebration of Nada-habba, Ganesha-utsava, etc., helped in kindling a nationalist spirit in the minds of the people of the area. In 1930, Gandhiji—during one of his tours–halted for sometime at the Bhanapur Railway Station (in Koppal taluk). On this occasion Sriyuths: Sirur Veerabhadrappa, Motammanavara Channabasappa, H. Kotrabasappa and others collected funds for Harijan welfare and presented the same to Gandhiji.

The people of the Hyderabad State had to fight not only against the British imperial power, but also against the Nizam's feudal and communal rule for achievement of independence and responsible Government.

At the Karnataka Sahitya Sammelan held at Raichur in 1934, a Nizam Karnataka Parishat was organised after calling for a meeting of all the leaders of the area at the residence of Sri P. Kishan Rao. The Parishat met at Hyderabad and adopted several resolutions, after which the political movement gathered further momentum. The "Vande Mataram" movement was started at this time. The Hyderabad State Congress was started in 1938. From Raichur district, Sriyuths: Janardhana Rao Desai, J. K. Praneshacharya, Ramachar Gurgunti, Krishnacharya Joshi, Raghavendracharya Jagirdar and a few others were closely associated with Swami Ramananda Teertha and other leaders in starting and carrying on the activities of this Congress in the Hyderabad Karnatak area. In the "Quit India" movement of 1942, the first satyagrahi from Raichur was Sri Adavirao Phadnavis followed by Ganadal Narayanappa; both of them courted arrest among others. Besides, Dr. B. G. Deshpande, who used to play host to political leaders visiting Raichur, was taken to the Sadar Bazaar Police Station and was severely beaten up.

The fourth session of the Karnataka Parishat was also held at Raichur and the demand for establishment of responsible Government was reiterated. The events that were taking place in other parts of the country had also their impact on the people of this area. Several persons from the district offered satyagraha during 1947. Among those who courted arrest on the occasion were Gudihal Hanumantha Rao, R. G. Joshi, G. Madhwa Rao and a few others. In between 1945-47, an Anti-Levy Movement was organised in the district, as a protest against the compulsory levy order of the then Government. Ganadal Narayanappa, Adavirao Phadnavis, R. G. Joshi, B. H. Inamdar and a few others formed a committee, toured the entire district, organised the movement and presented a report to the then Food Minister, explaining the hardships of the people and demanding the withdrawal of the levy order.

The Hyderabad State Congress, which met at Sholapur in June-July 1947, constituted a Council of Action to intensify the struggle. Sri J. K. Praneshacharya was made its secretary. On 7th August 1947, "Indian Union Day" was observed throughout the State. Processions, sathyagrahas, picketings, etc., were organised in about 345 centres in the State: the police resorted to lathi charges and a number of people were arrested. At Raichur, Sri Gudihal Hanumantharao, Sri R. G. Joshi, Sri D. Narayanappa, Sri Adavirao Phadnavis and others were arrested. At Gangavati, Koppal and other places, Sriyuths: Keshavarao Vakil, R. M. Gangavati, Lakshmanacharya Agnihotri, Raghavendra Rao Itagi, Janardhana Rao Desai and others were arrested for addressing public meetings.

Reign of terror

The State Congress decided to hoist the national flag everywhere on the 15th August 1947. This decision led to a reign of terror by the Nizam's Government. The Razakars under Kasim Razvi also did their worst. But yet, thousands of people hoisted the national flag and faced the wrath of the Government. Lathi charges, firings and arrests took place. Among those arrested on the occasion was Sri G. Madhwa Rao of Raichur. About 30 students offered satyagraha and courted arrest. The satyagraha was led by Sadashiva Rajpurohit. Three students, under the leadership of Matmari Nagappa along with Parvatha Reddi, hoisted the national flag on the Sath Katcheri (*i.e.*, the present Deputy Commissioner's office) on the 15th August 1947.

On the arrest of Swami Ramananda Teertha and other executive committee members of the Hyderabad State Congress, Sri D. G. Bindu took over the presidentship and issued a call to observe a 'Flag Day' on 2nd September 1947. This programme was also carried out with great success. Under the guidance of Sri Janardhana Rao Desai, a training camp for the Congress workers of the Hyderabad-Karnatak area was set up at Gadag. Sri Burli Bindu Madhava Rao and others helped in organising the camp and training the workers. The Congress workers in the border areas strove to stem the tide of the violent activities of the Razakars and several lost their lives in this struggle and a large number suffered hardships. The Razakars burnt 76 hutments at Raichur.

In the struggle, Sri Alavandi Shivamurthy Swamy, Veerabhadrappa Sirur, L. K. Sharoff and several others of Raichur district took active part. Training camps were conducted by Sri Sirur Veerabhadrappa and Sri Shivamurthy Swamy and a number of persons were given training in handling of arms and ammunition to fight the atrocities of the Razakars.

Police Action

India's achievement of independence on August 15, 1947, was closely followed by the integration of Indian States. But

the Nizam refused to fall in line with the other States and declared his independence on 27th August 1947. This gave a shock to the people of Hyderabad, who sharply reacted against the policy of the Nizam. The agitation was mostly non-violent; but when the national flag was declared as foreign and the arrested leaders were accorded ill-treatment in the prisons, it took a violent turn; there was even an attempt on the Nizam's life. Meanwhile, there arose the notorious militant Razakar organisation, which took to violent activities in the State, under the control of the president of the Ittehad-ul-Musalmeen. This was followed by an year of reign of terror throughout the State. The appeals of several eminent persons, including Muslims, to disband the Razakar organisation and dissolve the separate State military force fell on deaf ears, and the Razakar reign of harassment and loot continued unabated. The Razakars committed aggression even against the Indian Union territories and there were as many as 150 incursions upto 7th September 1948. The Government of India could no longer sit silent. Meanwhile, it started negotiations, which, however, proved fruitless. By about the beginning of the year 1948 itself, it became clear that the Nizam was actually on the war-path and from the middle of the year, the Government of India began taking defensive steps. The Nizam appealed to the United Nations Organisation, but found no support there. At last, on 13th September 1948, India started its police action against the misrule in Hyderabad. The Union forces pierced the State at eight points. Strangely enough, there was not much of a resistance. There was some fighting on 17th September 1948, but the Nizam ordered a cease-fire at 5 P.M. on the same day and permitted the free entry of the Union forces into Secunderabad. On the 18th September 1948, Hyderabad was reborn.

During the days of the police action, Raichur went through a very anxious time. There was some fighting near the Tungabhadra Dam at Munirabad. The Pathans, who had been stationed nearby, looted many families near Kushtagi. In the town of Raichur, there was great anxiety, as the Razakars had planned to blow up the bridge over the Krishna river. According to a Hyderabad State Government publication,[87] Raichur had a large 'Razakar population' and it suffered proportionately. But soon after the arrival of the Civil Team on 18th September 1948, normal conditions were restored in the larger part of the district. With the aid of troops, systematic searches for looted property were made and within 20 days such properties were traced. 'The people of the district got on admirably with the troops' and within a few months, the district fully regained its peaceful conditions and normal life.

End of Asaf Jahi rule: India's police action against the misrule in Hyderabad meant practically the end of the Asaf Jahi dynasty's rule in Hyderabad. The Hyderabad State, however,

continued intact upto 1st November 1956, on which day the reorganisation of States automatically brought about its disintegration. The State was divided into its three linguistic components and the Kannada-speaking portion was made part of the new Mysore State.

ARCHAEOLOGY

Prehistoric archaeology has been dealt with at the beginning of this chapter. The following paragraphs, therefore, deal with the archaeological discoveries in the district belonging to the subsequent periods only. The most important sites from this point of view are Maski and Kadkal. At Maski has been found an Ashokan edict, the speciality of which lies in the fact that the king has been referred to therein by his personal name, in addition to his epithets such as Devanam Piya and Piyadasi. Ashokan edicts, of a different version, have also been discovered at two other places, called the Gavimatha and Palkigundu hills near Koppal.

Some more sites have been excavated at Maski, belonging more or less to the same period. According to G. Yazdani, some of the human and other terra-cotta figurines found there, including the one crudely representing a horse, belong to the fourth or third century B.C., and the impression of a seal on a small baked disc and some specimens of glass bangles to the second or first century B.C. He also opines that during this period *Maski was a great centre of bead and chank industries.*

The excavations at a site called Suryanwari in Maski are specially interesting in this connection. At this site, which is situated to the east of Suledubba, there have been found, in addition to the remains of furnaces and slag which were discovered in abundance, three groups of old structures. One of the discoveries is a well, about 20 feet deep, built of granite slabs of a uniform size measuring $4' \times 1\frac{1}{2}' \times \frac{3}{4}'$. At the corners of the slabs, grooves were cut in such a manner that four slabs could fit into the well in the form of a frame, thus obviating the necessity of using any cementing material to keep the slabs together. Two other sites nearby disclosed pavements and foundations of old apartments, the superstructures of which have completely disappeared. Some of the pavements, usually of brick, extend over an area of about $40' \times 20'$. The foundations are mostly of rough stone. This site is locally called Suryanwari. It has been suggested by some that Suryanwari may be a corruption of Suvarnanagari, which was the seat of Ashoka's government in the south and which has been identified by some scholars with modern Maski.

At a site, situated north of Suledubba, a trench, about five feet in breadth, has exposed a brick pavement extending to a length of 98 feet and the foundations of some apartments. At another site, on the left bank of the river Maski, about a furlong to the west of the dak bungalow, have also been found foundations of massive character under the ground. The latter site has also yielded three gold coins of great numismatic interest. One of them is a tiny piece bearing an elephant on one side and a lion on the other. The other two contain a lion on one side resembling the one found on the Kadamba coins, but differing from it in certain respects. No definite date has been assigned to these coins.

Kadkal, situated about three miles away to the north-west of Lingsugur, is an important prehistoric and also early-historic site. At this place had been found some years ago some bronze images of Jaina Teerthankaras by a cultivator while ploughing his field. The matter was reported to the Archaeological Department of the former Hyderabad State, which, on an examination of the site, found pieces of brick of an unusual size in great abundance lying scattered in the field, suggesting the presence of structural remains under-ground. As Jaina images were found, it was presumed that a Jaina temple might have existed there. The view was confirmed by the nature of the finds unearthed there during the excavations in 1936-37. The brick pavement and the foundations of a large temple, each side of the main building of which measured 90 feet, were discovered. The bricks that were used in the construction of this temple measure about 17"×10"×2.5". One side of the flat surface is plain, but the other side has many grooves, about three-fourths of an inch in breadth and half an inch deep. They were evidently made with a view to the bricks sticking better in the building material.

Bronze Images

Among the most important discoveries made here are 17 bronze images representing Jaina Teerthankaras. The largest of these images measures 22½"×10½" and the smallest 7½"×2½". With the images were discovered three pedestals, one of them bearing a Kannada inscription. Traces of old houses belonging to the age of the main temple are also to be found all round the site.

To the north-east of this site, at a distance of about a mile and a half, remains of foundations of massive construction were discovered, which were formerly covered with rank vegetation in the form of a mound. The remains are of a large building, nearly square, measuring 300'×300', the superstructure of which has completely disappeared. The walls built of mud and stone measured about five feet in thickness. A passage of uniform width (24 feet) runs all round the main building, which is divided

into rectangular apartments of varying dimensions. At a distance of about 150 feet from this site, there are remains of some other smaller buildings, which are now in the form of stone-heaps.

We now come to another interesting find. In the vicinity of these buildings, some terra-cotta slabs bearing circular cavities were discovered. It was surmised that the slabs were the moulds of old coins, and some trial trenches were dug which exposed sites of furnaces with traces of ash and pieces of terra-cotta moulds and also coins of unknown varieties, the coins exactly fitting into the moulds. Some of these coins have on the obverse a flying Garuda facing to the right with folded arms, while others have a bull facing left. The coins bear a legend in Nagari script. On palaeographical basis, it has been inferred that the coins range between the 11th and the 14th centuries A.D.

Temples

Now, coming to the architectural remains of the district, these can be seen under two heads—temples and forts. The most important places to be studied from the point of view of temples in the district are Kuknur and Itgi, both in the Yelburga taluk. which contain some excellent specimens representing the later phase of the Chalukyan architecture; the phase paved the way for the emergence of the Hoysala school of architecture. The limits of the period during which this phase of architectural development thrived are roughly A.D. 1000 and A.D. 1300. The exact dates of the examples and their sequence, in several cases, however, are only to be conjectured on the basis of the inscriptions found in or near the buildings, the local history, the details of style, etc. The earliest examples of this phase are, probably, some of the temples of Kuknur, which not only depict the initial character of the movement, but also provide clear examples of the transition between the 'early' Chalukyan type as found at Aihole and Pattadkal in the Bijapur district and 'later' Chalukyan type as found at various places like Dambal (Dodda Basappa), Lakkundi (Kashi Vishveshvara), Hanagal (Tarakeshvara), Gadag (Trikuteshvara), Haveri, Bankapur, Neeralgi, Unkal, etc., in the Dharwar district and Kuruvatti (Mallikarjuna), Bagali (Kalleshvara), Nilagunda (Bhimeshvara), Hire-Hadagali (Katteshvara), Huvina-Hadagali, Halavagalu, etc., in the Bellary district. In two of the temples at Kuknur, we see the only examples of this phase executed in the somewhat coarse sandstone, the typical material of the earlier period, all the subsequent temples of the group being built of the more refined and tractable chloritic schist. The older of the two structures is what is called the Navalinga group of temples. It consists of a cluster of nine cells, connected with one another by means of *mantapas,* around three pillared compartments, placed in a vast courtyard enclosed by high battlemented walls resembling the ramparts of a fort. Each of these nine temples has a *shikhara* of its own, which is very similar to the type at Pattadkal, except

for the domical apex which is already beginning to show signs of change. Due to the soft and friable nature of the material used, the crowning members of some of the *shikharas*, as at Aihole, have fallen away and disappeared. In the plastic decoration of the exterior also, there is the same boldness and coarseness as is evident in their earlier models.

Kalleshvara temple

The other example at Kuknur is the temple of Kalleshvara. Though this temple is more or less similar to the Navalinga shrine in structural details, we can say that it is of a later date, from its more refined treatment. With a cella, a vestibule, a four-pillared hall and a separate Nandi porch, all in axial alignment, the temple measures 67 feet long and 37 feet broad and its *shikhara* is 37 feet high, so that it is 'a compact and well-proportioned composition'. Its exterior walls are decorated with simple but effective pilasters at fairly close intervals, with a few mural shrines or similar structural motifs interposed in between. The tower, in this case, clearly depicts the beginning of the departure from the earlier Pattadkal model. Its separate storeys are more sharply defined; this feature together with the pronounced double flexured curve in the outlines of the cupola at the apex, shows that progress towards the flattened and more florid Hoysala type was already on its march. An unusual feature in the pillared hall here is the four windows cut nearly seven feet through the thickness of the walls. "In view of their style and that they are built of the same material. these two structures at Kuknur appear to be closely allied to the temples of the Early Chalukyan group as at Aihole and Pattadkal and should be but little removed from them in date, although, on historical grounds, one would place them as late as the last half of the tenth century."[88] The temple at Itgi is that of Mahadeva and is an "illustration of this phase of the builders' art at its meridian." It is said that this temple was the centre of an important group of religious structures arranged on a specially built terrace and containing an ornamental tank, 'the whole a very fine conception, evidently the focus of much spiritual activity early in the 12th century A.D.' At present, the only building that is intact is the temple of Mahadeva which too has lost the upper part of its *shikhara*. "Even with these defects, it is a beautifully hormonised structure, orthodox and symmetrical in its arrangements, as it consists of a hypostyle hall, chamber of assembly (*navaranga*), with a pillared porch on either side, a vestibule and a cella, all grouped together in a simple and appropriate manner. It is of a fair size, as it measures 120 feet long by 60 feet wide and its tower would have been over 40 feet high, the general appearance of the whole proving that these proportions produce a very pleasing result." According to some standards, its decorative treatment may be considered excessive, but nonetheless, it is all balanced and orderly, and, although rich, its elements are well thought out and carefully distributed.[89]

Raichur fort

The original fort at Raichur, according to a long inscription on a slab on the western wall, was built by one Raja Vitthala by order of Raja Gore Gangaya Raddivaru, minister of the Kakatiya queen Rudramma Devi, in the Shaka year 1216 (A.D. 1294). The walls of this fort are constructed of huge blocks of well-dressed and nicely fitted stones, without the aid of any cementing material whatever. The outer wall, which is constructed of comparatively rough stone masonry, however, is the work of the Muslims, as is shown by the various inscriptions in Arabic and Persian on its bastions and gateways. There are two gateways in the Hindu fortifications (Sailani Darwaza in the west and Sikandari Darwaza in the east) and five in the Muslim fortifications (Mecca in the west, Naurangi in the north, Kati in the east, Khandak in the south and Doddi in the south-west). The outer wall is enclosed by a deep moat on three sides, the fourth (or the southern) side being naturally defended by a row of three rocky hills, all fortified with massive ramparts. Inside the fort-walls, there are a number of old buildings and mosques of considerable archaeological interest, several of them containing inscriptions commemorating their erection during the later Bahmani and the Adil Shahi periods. The inscription referred to above is carved on a gigantic slab, about 42 feet in length, fitted in the western face of the Hindu defence. A number of drawings have been carved on this wall, at least one of which deserves a special mention here.

A little distance to the right of the above epigraph, is depicted the process by which the large inscribed slab was brought from the quarry to the site, laden on a solid-wheeled cart drawn by a long team of buffaloes with men driving and cudgelling the animals and applying levers at the wheels to push the cart forward. "The artistic treatment in delineating the line of buffaloes in perspective, and the lively and graphic expression of the strain on them as represented by means of depicting some with tongues lolling out of their mouths, some with bent waists, and others with tails curled and lifted up as is usually seen when these animals are put to an extra strain, is indeed a marvel of the art of drawing, particularly when the age of the work is taken into consideration."[90] Further to the right is carved a procession scene of six chariots, drawn by humped bulls with decorative collars round their necks, and a little distance to the south is carved a forest scene with palmyra trees. "On various other slabs in the same wall are incised floral and foliage designs as well as numerous figures of men engaged in various activities, and also animals and birds, like bulls, elephants, boars, jackals, cocks, peacocks, geese, etc., all executed in the same delightful manner".[91] The *bala-hisar* or the citadel, situated on the middle and loftiest of the hills on the southern side, is approached partly by a flight of steps near the south-west corner of the Hindu

wall and partly by a gradual slope which is by no means difficult of ascent. It stands on an irregularly shaped platform and contains mainly, a durbar hall, a small one-arched mosque in Bijapur style, a dargah called Panch Bibi Dargah and a square cistern now filled up with earth.

Mudgal fort

The Mudgal fort consists of a citadel perched on a hill protected by a line of outer fortifications on the plain. These outer fortifications consist of a wide moat, the width of which varies reaching as much as 50 yards at some places, followed by a scarp with a row of bastions and, after that, a narrow covered passage and finally a counter scarp with very massive bastions. The courses of masonry at several places are of Hindu style; but the arch-shaped parapet is Muslim in design. On a massive bastion opposite the Fateh Darwaza has been placed a gun with a Kannada inscription near the muzzle. The *bala-hisar* (citadel), already referred to, commands a good view of the interior of the fort as well as the surrounding country. The hill has been strengthened at points by walls and bastions, there being a large bastion in the middle of the hill also. There are a number of natural caverns and depressions on the hill and in the western part of the fort is a large cistern—about 140 yards long and 40 to 50 yards broad.

Koppal fort

The fort of Koppal is of great natural strength and has been described by Sir John Malcolm, one of the greatest British Generals, as " without exception the strongest place" he has seen in India. The Europeans, with their strong artillery, could make little impression on it, " at the end of six months' siege ". The fortifications consist of two forts, the upper and the more important being situated on a lofty and almost isolated hill, rising about 400 feet above the plains. Its strength lies mainly in its inaccessibility except by a flight of very rude and rough steps which are in some places extremely narrow and dangerous. " Koppal is undoubtedly one of the finest examples of the military architecture of the Dekkan."[92]

Amongst the other archaeological remains, mention may be made here of the remains of some magnificent buildings of the Vijayanagara days that are still traceable at Anegundi. Fine specimens of the contemporary work can be seen on the pillars of the Oncha-Appa Matha and in the sculptural details of the Ganesha temple. There are also some fresco paintings, belonging to the early Rajput style, on the ceiling of the above-mentioned *matha*. One of these paintings depicts Shiva with a long beard riding on an elephant. Nine acrobats are depicted as having joined themselves in the form of an elephant. In another painting, five women have arranged themselves in the form of a horse.

Raichur district is very rich from the epigraphical point of view also. It has already yielded hundreds of inscriptions, ranging right from the Mauryan period upto the end of the Muslim period, in a variety of languages like Sanskrit, Prakrit, Kannada, Arabic and Persian and belonging to almost all the dynastics that ruled over the Dekkan. The most important places from this point of view are Maski, Koppal, Kuknur, Mudgal and Raichur.

NOTES ON CHAPTER II

1. See *Mysore Inscriptions*, p. 251.

2. Yazdani: Appendix B to the *Annual Report of the Archaeological Department of H.E.H. the Nizam's Dominions for* 1935–36. He further says that the horse has also been badly drawn by the artists of Ajanta. The horse, it may be noted in this connection, was not formerly native to the Indian soil. It is said to have been introduced into India, or even in Asia, by the Aryans in the second (or third) millennium B.C.

3. E.g. K. A. Nilakanta Sastri: *A History of South India*, p. 52.

4. E.g. *Cambridge History of India*, Vol. I, p. 615.

5. Near Kallur were also found by the local Voddas, while blasting a boulder on one of the hills around the place, three copper swords concealed under it. These swords, which were made over to the Revenue Department, were finally passed on to the Archaeological Department of the former Hyderabad State. The then Director of Archaeology has stated that there is great similarity between them and those discovered at Fategarh in U.P., of which mention has been made by Sir John Marshall in the *Cambridge History of India*, Vol. I, p. 614. (*Annual Report of the Archaeological Department, Hyderabad*, for the year 1938–39).

6. Opinion is divided on what areas were included in Kuntala. The narrowest definition restricts it only to the areas round about Banavasi, whereas the widest takes its northern limit upto as far as Kalyana. Some authors have taken the term vaguely to mean 'northern Mysore and western Dekkan'. In the circumstances, it appears that the present Raichur region may safely be taken to have formed a part of Kuntala.

7. M. Rama Rao: *Glimpses of Dekkan History*, p. 20.

8. R. D. Banerji: *Prehistoric, Ancient and Hindu India*, p. 177.
   S. Srikantha Sastri: *Maisuru Rajya*, p. 15.

9. D. C. Sircar: *History and Culture of the Indian People*, Vol. II, *The Age of Imperial Unity*, Chapter on the Satavahanas and the Chedis, p. 192.

10. *Historical Inscriptions of Southern India*, p. 398.

11. K. A. Nilakanta Sastri: *A History of South India*, p. 95

12. *Karnataka Darshana*, pp. 30—31.

13. P. B. Desai: *Shasana Parichaya*, Ins. No I.

14. *Rashtrakutas and their Times*

15. *Shasana Parichaya*, Ins. No. 9.

16. *Ibid*, Ins. No. 32.

17. There were two kings of this name, Indra I and Indra II, amongst the early Rashtrakuta kings, *i.e.*, before Dantidurga.

18. When exactly the capital was shifted from Malkhed to Kalyana is not known. That it was still at Malkhed is clear from an inscription from Kakhandki (in the Bijapur district) and some Chola records of Rajendra Chola I (1012-1044). It was shifted to Kalyana probably during the later years of Jayasimha II (1015-1042)—(P. B. Desai: *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, p. 4) or during the early years of Someshvara I (1042-1068)—(K. A. Nilakanta Sastri: *A History of South India*, p. 176).

19. P. B. Desai: *Shasana Parichaya*, Ins. No. 6, edited by the same author in his '*A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*,' Ins. No. 11.

20. *Shasana Parichaya*, Ins. No. 23.

21. Edited by P. B. Desai in '*A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*', Ins. No. I.

22. *Shasana Parichaya*, Ins. No. 3.

23. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. Nos. 3 and 4.

24. *Ibid*, Ins. No. 5.

25. There is no unanimity in the identification of this place. It has been variously identified with the meeting places of the Panchaganga with the Krishna, of the Tungabhandra with the Krishna and of the Tunga with the Bhadra.

26. D. C. Ganguly: *The Struggle for Empire*, Chapter on the *Later Chalukyas and Kalachuris of Kalyana*, p. 117.

27. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 6.

28. The date of Vikramaditya VI's coronation has been fixed variously by different scholars, *e.g.*, 12th February 1076 according to Fleet (*Indian Antiquary*, Vol. VIII, p. 189); 9th March 1076 according to the same author (*Bombay Gazetteer*, Vol. I, part II, p. 446), and accepted by Kielhorn (*Indian Antiquary*, Vol. XXII, p. 109); 8th March 1076 according to Sewell and Aiyangar (*The Historical Inscriptions of Southern India*, p. 85), etc. The date accepted here has been arrived at by Dr. P. B. Desai after consideration of all the concerned inscriptions available. (Article on the Chalukya Vikrama Era in the Karnataka number of the *Quarterly Journal of the Mythic Society*) and by Govinda Pai on different arguments (*Karnataka Sahitya Parishat Patrike*, Vol. IV, p. 200).

29. *Shasana Parichaya*, Ins. Nos. 37, 40 and 47.

30. *Hyderabad Archaeological Series*, No. 5.

31. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 7.

32. *Ibid*, Ins. No. 8.

33. *Ibid*, Ins. No. 9.

34. *Shasana Parichaya*, Ins. Nos. 6, 35 and 45.

35. *Ibid*, Ins. Nos. 19, 46, 48 and 52.

36. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 15.

37. *Shasana Parichaya*, Ins. No. 36.

38. D. C. Sircar: *The Classical Age*, Chapter on the Dekkan in the Gupta Age, p. 194.

39. P. B. Desai: *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, p. 9.

40. *Shasana Parichaya*, Ins. No. 49.

41. P. B. Desai: *Karnatakada Kalachurigalu*, *Kannada Sahitya Parishat Patrike*, Vol. XXXVI, Nos. 1—2.
M. Govinda Pai: *Muru Upanyasagalu*, pp. 79-82.

42. *Shasana Parichaya*, Ins. No. 50.

43. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 12.

44. *Epigraphia Carnatica*, Vol. IV, Nagamangala 70; Vol. V, Belur 137 and 193.

45. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 13. This inscription throws a flood of light on the importance of Kuknur in that period, the religious tendencies of those days and some contemporary customs. Kuknur, at that time, was not only the head-quarters of a small tract called Kuknur-30, but was also the most important *agrahara* town of the days, having a representative strength of 1,000 Mahajanas. These Mahajanas were learned and proficient in several branches of knowledge. There were many of religious, educational and other institutions at Kuknur, which has been described as Shiva-Shakti-Sphurat-Samputa-Kshetra. There were several temples at this place, the most important of which was that of Jyestha, who is now commonly called Mahamaya. In the second half of the 12th century, there flourished at Kuknur an eminent line of Kalamukha teachers. Foremost among these was Siddhanti Kaleshvara, an erudite scholar, a mystic saint and an ardent devotee of Jyestha. The inscription eulogizes the marvellous powers and great attainments of this man.

This inscription also describes in detail the boundaries of the gifted village in all the eight directions, starting from the east and proceeding through the

south-east. The boundaries were demarcated with the help of Lingada Kallus or Linga stones. This was so, because the endowment pertained to the Shaivite deity. Similar boundary stones, which are commonly known as Linga-mudreya-kallu, are met with in various parts of Karnataka. Stones marking the boundaries of lands devoted to the Vaishnava deities bore the characteristic symbols of that faith, such as the conch and the discus. Jaina gift-villages or lands were distinguished by Jaina symbols, such as the triple umbrella. The painting of those stones was done before the actual gift and in the presence of the public including the village assembly. It may be noted here that this practice was prevalent in the neighbouring provinces also, *e.g.*, in the Tamil country. Tamil epigraphs contain several more interesting details of this custom (*Epigraphia Indica*, Vol. XXIV, p. 32).

46. *Shasana Parichaya*, Ins. No. 22.

47. *A Corpus of the Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 14.

The copper-plates, which were in possession of one Sadara Rudra Gauda, are now with Dr. P. B. Desai, the author of this collection.

48. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 16.

49. There is a hill near Karadikal, not far from the Someshvara temple, containing the slab with this record, which is widely known as Bhillamarayana Gudda or Bhillamaraya's hill.

50. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 17.

51. *Shasana Parichaya*, Ins. No. 47.

52. *Ibid*, Ins. No. 27.

53. *Ibid*, Ins. No. 17.

54. *Ibid*, Ins. No. 28.

55. *Epigraphia Carnatica*, Vol. IV, Nagamangala-70; Vol. V, Belur 137 and 193.

56. *Shasana Parichaya*, Ins. No. 21.

57. This section is entirely based on Dr. P. B. Desai's *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*. The numbers given in brackets in this section indicate the serial numbers of the inscriptions edited by him in this collection.

58. *Epigraphia Indica*, Vol. XII, pp. 269 and 291.

59. The contents of these two inscriptions have been briefly noticed in the introduction to the *Shankara Dasimayya Purana* of Mallikarjuna—edited by V. B. Halabhavi. This Jadeya Shankara was the favourite deity of Shankara Dasimayya, a Shaiva saint of the eleventh century A.D.

60. *Epigraphia Carnatica*, Vol. VI, Mudagiri 36.

61. *Epigraphia Indica*, Vol. XX, p. 111.

62. *Shasana Parichaya*, Ins. No. 35.

63. *Ibid*, Ins. No. 31.

64. *Shasana Parichaya*, Ins. No. 36.

65. *Ibid*, Ins. No. 33.

66. When Malik Zada began to plan an invasion of Hoysala kingdom, in pursuit of Baha-ud-din, Ballala III, who did not wish to risk his kingdom by sheltering a rebel Muslim, handed over Baha-ud-din to him, and himself acknowledged the supremacy of the Sultan of Delhi.

67. H. K. Sherwani: *The Bahmanis of the Dekkan*, p. 15.

68. The Raichur doab had been a bone of contention during the earlier periods also. If we turn the pages of history of this region, we can see that it had been the cause of conflict between the Chalukyas and the Cholas as well as between the Yadavas and the Hoysalas. The real cause for the Bahmani–Vijayanagara struggle, is therefore, to be sought for not so much in the religious differences between the kingdoms, as in the position held by the doab itself from the economic and political points of view, as has been suggested by Gurti Venkata Rao ('Bahmani–Vijayanagar Relations' in the *Proceedings of the Indian History Congress, Allahabad*, p. 264).

69. *Historic Landmarks of the Dekkan*, p. 105.

70. The descendants of these victims were allowed to resume their business late in the reign of Firoz Shah (1397–1422), then too on payment of large sums of money to the king.

71. It has also been variantly stated that this happened on the 21st March 1365, when Muhammad sat on the throne which was originally meant for Muhammad-bin-Tughlak and which he now got from Kapaya Nayaka and celebrated the occasion with great eclat. (K. A. Nilakanta Sastri: *A History of South India*, p. 234).

72. Haig: *Historical Landmarks of the Dekkan*, pp. 107—108. Some have tried to explain this otherwise incomprehensible act, by saying that it was perhaps to ascertain Bukka's attitude (Gurti Venkata Rao, *Op. Cit.* p. 266) as well as to test his political superiority (H. K. Sherwani, *Op. Cit.* p. 9).

73. It is said that it is during this war that cannon and fire-arms were used by Bahmanis for the first time. Ferishta says that guns were used by both the parties on this occasion. The gunners were generally Europeans and Ottoman Turks.

74. The story of the girl may be stated briefly as follows: She was a daughter of a poor goldsmith of Mudgal. Her name was said to be 'Parthal'. The goldsmith wanted to give her in marriage to a youth of his own caste. But

the girl, conscious of her beauty, persuaded him not to do so. A Brahmin instructed her in music, in which she soon showed great skill and she became proficient in the art. The Brahmin then went to Vijayanagara where he spread the news of his pupil's beauty and accomplishments. The report ultimately reached the king, who sent for the Brahmin, questioned and requested him to secure the girl for him in marriage, promising to make her his principal queen. The Brahmin returned to Mudgal and conveyed the royal message to the goldsmith's family. He had, of course, no difficulty in making the girl's parents accept the offer. But to the great surprise and disappointment of all, the girl herself refused to accept this honour. Perhaps, being in the Bahmani kingdom, she dreamt of becoming Bahmani queen from the very beginning. Whatever it may be, her refusal to marry the Vijayanagara king led to the war, in which he lost much in addition to her. As for the beautiful 'Sonarin,' her dream came true and she became the wife of a Bahmani prince.

75. K. A. Nilakanta Sastri: *A History of South India*, p. 239.

76. *A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, Ins. No. 18.

77. The cause of this war is said to be that in 1437, the Raja of Sangameshwara of Konkan gave his daughter to the Bahmani Sultan, who preferred her to his first wife, the daughter of Nasir Khan, and the latter rebelled in order to avenge this slight.

78. At the time of reorganising his army, Devaraya is said to have consulted his advisers as to the cause of superiority of the Muslims in warfare. Some Brahmins are said to have replied that the Muslim superiority had been a thing decreed by heaven and that the Almighty had granted them domination over the Hindus for many years. The soldiers, refusing to believe it, attributed the frequent victories of their opponents to their better horsemanship and archery. The Raya accepted the second view as sound and practical and began to reform his army from all points of view. He ordered that Muslims should be freely enlisted in his army; he built a mosque for them in the capital city and declared that they should be free to practise the rites of their faith without any hindrance. It is said that he even kept a copy of the holy Koran on a reading-stand before his throne, in order to conquer the Muslims' prejudice against making obeisance to an 'idolatrous' master. He reorganised his entire army employing Muslims also as Instructors and raised the pay of the Siledar Sawars in order that they might provide themselves with better steeds.

79. H. K. Sherwani: *The Bahmanis of the Dekkan*, p. 372.

80. K. A. Nilakanta Sastri: *A History of South India*, p. 247.

81. *Epigraphia Indi-Moslemica* (1939-40), p. 10.

82. It is said that among the Muslim kings, the recitation of the name of the ruler in the Khutba and the striking of coins mentioning his name were considered to be the necessary prerogatives of royalty (*Ibid* p. 11).

83. Dr. P. B. Desai noticed an inscription in the Mudgal fort, dated 1561, and mentioning Aliya Ramaraya (*A Corpus of Inscriptions in the Kannada Districts of Hyderabad State*, p. 14, Note 2).

84. Published by the Hyderabad State Committee appointed for the compilation of a History of the Freedom Movement in Hyderabad.

85. *The Freedom Struggle in Hyderabad*, Vol. I, p. 181.

86. Quoted in *The Freedom Struggle in Hyderabad*, Vol. II, p. 109.

87. *Hyderabad Reborn* published by the Government of erstwhile Hyderabad State in 1949.

88. Percy Brown : *Indian Architecture* (Buddhist and Hindu), p. 172.

89. *Ibid*, p. 173.

90. *Annual Report of the Archaeological Department of H.E.H. the Nizam's Dominions* for 1929-30, p. 8.

91. *Ibid*, p. 7.

92. *Some Aspects of Hyderabad*, 1954.

CHAPTER III

PEOPLE

Ethnic background

THE position of Raichur district almost in the heart of the Deccan plateau has made it, comparatively speaking, less open to racial intermixture than the coastal regions which have had from time immemorial trade and other contacts with the countries of the east and the west. Until about the time of the advent of the Muslims, there has not been much evidence of ethnic fusion or inter-racial influence; but it should be noted that even pre-Muslim Raichur, like any other part of the Deccan was far from being quite homogeneous ethnically. The Dravidian and the pre-Dravidian, with an admixture of the Aryan and other extra-Indian elements, have had their influence on the culture of the people of the district. "The Aryan and Dravidian forces have acted and reacted upon one another in the crucible of South India for so long a time that it would be an idle enterprise today to seek to disassociate one constituent from the other."

The Muslim conquest of the Deccan caused a rapid racial mixture in the region, which now comprises Raichur district, and this was accelerated by the establishment of the independent Deccan Sultanates. After breaking away from Delhi, these kingdoms had perforce to look, both for assistance as well as for inspiration, towards the Muslim countries outside India. Arabs Turks and Iranians were invited and encouraged to settle down here. The latter part of the history of the Bahmani dynasties saw much cultural fusion. Inter-marriages increased in number among the Muslims and the Hindus. This phenomenon gave rise to the birth of a new type—the Deccani—who is Muslim in religion but largely Hindu in customs and manners.

As in most other parts of India, the two epics, the Ramayana and the Mahabharata, provide a background to the social and cultural life of the people of the district. The traditions and customs of different castes have been influenced at different stages by this background of continuity. And, it would not be wrong to say that the sustained vitality that has kept the people together has been built up by the influence of the two national epics. Tradition and legend in Raichur say that the region was associated

with certain incidents in the life of the Pandavas. Certain spots near Koppal and a few other places are styled Pandavara-Vathara (the place of the Pandavas). Names given to specific hill-tops like Arjunanagundu (Arjuna's boulder) and Indrakila Parvata are also evidences of the possible association of this area with the Mahabharata. The region between the Godavari and the Krishna rivers has always been the home of history and legend and Raichur district also, though to the south of the Krishna, possesses a past that reaches back thousands of years. Primitive artifacts, megalithic tombs and dolmens prove the antiquity of the region. The discoveries at Maski and the many archaeological monuments of later history constitute a living past which is there not only for the delight of the historian and antiquarian, but also for all the people who are conscious of the rich cultural heritage of South India.

In Buddhist times also, Raichur figures prominently. The Chinese pilgrim, Hiuen Tsang, visited the region in the 7th century and his 'Konkinapulo' may perhaps refer to Koppal, which was known in ancient times as Kopana, Kupana and Kupina, and which was a fertile field for the growth of the Buddhist faith which flourished here from the 3rd century B.C. to the 7th century A.D. Jainism also flourished in the district. The existence in certain places like Adur, Koppal, Halgeri, Madinur, Rajoor and Kanakgiri of Jaina relics is testimony to the sway that Jainism had in this district. The Kadkal excavations have unearthed several Jaina images and what probably was a Jaina temple. According to inscriptions, even the *agrahara* towns of Kuknur and Gabbur had Jaina temples. In Koppal itself, an inscription of the 9th century has been found alluding to the locality as a holy abode from the Jaina point of view. Koppal was considered to be a foremost or a very sacred place among the *teerthas* or holy spots. There is a local saying that this place once had 772 Jaina temples; this may not have been literally true but it is enough to indicate its importance for the Jainas.

That the district of Raichur was at one time under the influence of the Mauryan empire is borne out by the existence of the Ashokan inscriptions at Maski, Palkigundu and Gavimatha and names like Morera Agasi (gate of the Mores) and Morera Angadi (shop of the Mores), the term 'More' obviously being derived from 'Maurya'. The district was part of the Satavahana empire and witnessed also the great days of the Kakatiya rulers. Then came the Muslim conquerors from Muhammad-bin-Tughlak right down to the Mughals and the Vijayanagar monarchs and all these have left their massive foot-prints on the district. Under the Nizams of the Asaf Jahi dynasty, Raichur played its own important part as part of the Hyderabad State and, along with the two other Kannada-speaking districts, Gulbarga and Bidar, became part of the new State of Mysore on 1st November 1956.

Population

The total population of the Raichur district, according to the 1961 census, was 11,00,895, while the population figure of the 1951 census was 9,53,640, the percentage of increase being 15.44. The following table gives male and female and rural and urban population figures for the district as in 1961 :—

Sex		*Rural*	*Urban*	*Total*
Males	..	4,72,139	82,404	5,54,543
Females	..	4,68,134	78,218	5,46,352
Total	..	9,40,273	1,60,622	11,00,895

The taluk-wise population of the district with rural and urban and male and female break-ups was as follows in 1961 :—

Taluk	*Sex*	*Rural*	*Urban*	*Total*
Deodurg ..	Males	47,712	4,319	52,031
	Females	47,583	4,241	51,824
Total ..		95,295	8,560	1,03,855
Gangavati ..	Males	48,178	9,764	57,942
	Females	46,054	9,262	55,316
Total ..		94,232	19,026	1,13,258
Koppal ..	Males	52,570	13,579	66,149
	Females	52,149	12,273	64,422
Total ..		1,04,719	25,852	1,30,571
Kushtagi ..	Males	49,996	3,680	53,676
	Females	48,747	3,524	52,271
Total ..		98,743	7,204	1,05,947
Lingsugur .	Males	58,676	9,364	68,040
	Females	58,096	9,117	67,213
Total ..		1,16,772	18,481	1,35,253
Manvi ..	Males	56,861	4,346	61,207
	Females	58,101	4,369	62,470
Total ..		1,14,962	8,715	1,23,677

Taluk		Sex	Rural	Urban	Total
Raichur ..		Males	55,610	32,482	88,092
		Females	55,416	30,847	86,263
	Total ..		1,11,026	63,329	1,74,355
Sindhanur ..		Males	43,721	4,870	48,591
		Females	43,781	4,585	48,366
	Total ..		87,502	9,455	96,957
Yelburga ..		Males	58,815	..	58,815
		Females	58,207	..	58,207
	Total ..		1,17,022	..	1,17,022

The density of population per square kilometre of the district in 1961 was 77, its place in the State in this respect being the 17th. The density in this district is even less than that in the four adjoining districts of Dharwar (142), Bijapur (97), Bellary (92) and Gulbarga (84).

Growth and variation

As in the case of all other districts of the State, the population of the Raichur district has also recorded an appreciable increase during the last few decades. The population of the district, which was 7,31,901 in 1901, had increased to 11,00,895 in 1961. Only during one decade, *i.e.*, between 1911 and 1921, there was a decrease of population to the extent of 61,100 owing to influenza which ravaged the district in a virulent epidemic form in 1918-19. Since then there has been a steady rise in population. The sub-joined table gives the variations of the population of the district since 1901 :—

Year	Population	Decade variation	Percentage decade variation
1901	7,31,301	..	..
1911	7,85,240	+ 53,939	+ 7.38
1921	7,24,140	— 61,100	— 7.78
1931	7,71,890	+ 47,750	+ 6.59
1941	8,57,533	+ 85,643	+ 11.10
1951	9,53,640	+ 96,107	+ 11.21
1961	11,00,895	+ 1,47,255	+ 15.44

According to the new principles of classification of urban areas, the towns are divided into six classes according to the size of population ranging from those with a population of one lakh and above (*i.e.*, class I) to those with less than 5,000 inhabitants (*i.e.*, class VI).

In the year 1961, the district had no town of classes I, III (20,000 to 49,099) and VI and had one town of class II (50,000—99,999), two towns of class IV (10,000—19,999) and seven towns of class V (5,000—9,999). Between 1951 and 1961, the increase of population among the ten towns of the district has varied from 10.21 per cent (in Deodurg) to 26.40 per cent (in Mudgal), while there was a large decrease in the population of the Munirabad Project Area (—65.93) owing to completion of the works connected with the dam and consequent dispersal of temporary workers. The population variations of the towns between 1951 and 1961 are given below :—

Town	*Population* 1951	*Population* 1961	*Decade variation*	*Percentage decade variation*
Raichur (Class II) .	54,032	63,329	+ 9,297	+ 17.21
Koppal (Class IV) ..	17,314	19,530	+ 2,216	+ 12.80
Gangavati (Class IV) ..	16,263	19,026	+ 2,763	+ 16.99
Lingsugur (Class V) ..	7,835	9,565	+ 1,730	+ 22.08
Sindhanur (Class V) ..	7,516	9,455	+ 1,939	+ 25.80
Mudgal (Class V) ..	7,054	8,916	+ 1,862	+ 26.40
Manvi (Class V) ..	7,903	8,715	+ 812	+ 10.27
Deodurg (Class V) ..	7,767	8,560	+ 793	+ 10.21
Kushtagi (Class V) ..	6,082	7,204	+ 1,122	+ 18.45
Munirabad—Project Area (Class V).	18,555	6,322	— 12,233	— 65.93

Scheduled Castes and Tribes

The total number of persons belonging to the Scheduled Castes in the district in 1961 was 1,14,079, which worked out to 10.36 per cent of the total population of the district or 3.66 per cent of the total population of the Scheduled Castes in the State. The Raichur taluk, whose total population was 1,74,355, topped the list with 25,259 persons belonging to the Scheduled Castes, while the Kushtagi taluk, whose total population was 1,05,947, had the least number of members of the Scheduled Castes, among the taluks of the district. The number of persons belonging to the Scheduled Tribes in the district was only 45. The following

statement gives taluk-wise figures for the Scheduled Castes as in 1961 :—

Taluk			Males	Females	Total
Deodurg	..	..	7,158	7,234	14,392
Gangavati	..	..	4,824	4,936	9,760
Koppal	..	..	5,605	5,642	11,247
Kushtagi	..	..	3,386	3,319	6,705
Lingsugur	..	..	6,281	6,464	12,745
Manvi	..	..	6,290	6,291	12,581
Raichur	..	..	12,736	12,523	25,259
Sindhanur	..	..	5,615	6,028	11,643
Yelburga	..	..	4,723	5,024	9,747
	Total	..	56,618	57,461	1,14,079

The rural and urban break-ups of the population of the Scheduled Castes in the district were as follows :—

		Males	Females	Total
Rural	..	49,030	49,911	98,941
Urban	..	7,588	7,550	15,138
Total	..	56,618	57,461	1,14,079

The following have been recognised as Scheduled Castes in the district :—

1. Annamuk
2. Aray (Mala)
3. Arwa Mala
4. Beda (Budga) Jangam
5. Bindla
6. Byagara
7. Chalavadi
8. Chambhar
9. Dakkal (Dokkalwar)
10. Dhor
11. Ellamalwar (Yellammalawandlu)
12. Holeya
13. Holeya Dasari
14. Kolupulavandlu
15. Madiga
16. Mahar
17. Mala
18. Mala Dasari
19. Mala Hannai
20. Malajangam
21. Mala Masti
22. Mala Sale (Netkani)
23. Mala Sanyasi
24. Mang
25. Mang Garodi
26. Manne
27. Masthi
28. Mehtar
29. Mitha Ayyalvar
30. Mochi
31. Samagara
32. Sindhollu (Chindollu)

The recognised Scheduled Tribes in the district are the following: Bhil, Chenchu or Chenchwar, Gond (including Naikpod and Rajgond), Koya (including Bhine Koya and Rajkoya) and Thoti, while the Denotified Tribes are Lambani or Lambada, Woddars, Paradhis, Yerkula and Kaikadi. It is estimated that there are about 75,000 persons belonging to the Denotified Tribes and 10,000 persons belonging to the Nomadic and Semi-nomadic Tribes in the district. (*See* also Chapter XVII).

Religions

The following statement gives the religion-wise distribution of the population of Raichur district. The figures pertain to the 1961 census.

		Males	*Females*	*Total*
Buddhists	..	2	..	2
Christians	..	6,172	6,057	12,229
Hindus	..	4,80,912	4,74 863	9,55 775
Jains	..	1,018	791	1,809
Muslims	..	66,417	64,628	1,31,045
Sikhs	..	12	4	16
Zoroastrians	..	1	..	1
Religion not stated	..	9	9	18
Total	..	5,54,543	5,46,352	11.00,895

Hinduism

The term 'Hindu' is wide in its connotation and includes many faiths. The two dominant religious faiths coming under Hinduism may be said to be Brahmanism belonging to Vaidika school and Veerashaivism, which, while having several points in common with that school, differs from it in many others. Brahmanism is represented, for instance, by the various sects of *Brahmins* and Veerashaivism by a number of castes, wholly or partly professing the Veerashaiva or Lingayat faith. The term 'Lingayat' is sometimes taken to denote a caste*, but it would be more correct to treat it as indicating a faith or a way of life. It is a general designation for many castes, the members of which wear traditionally a *linga* on their bodies.

Brahmanism

Among the Brahmins, all the three important sects are represented in the district, *i.e.*, Madhva, Smarta and Srivaishnava. The Madhvas derive their name from Madhvacharya, the founder of the sect, who lived in South Kanara about the thirteenth century. They worship both Vishnu and Shiva, but *more* particularly the former. They profess the doctrine of *Dvaita* or

*So is the Brahmin and therefore, both of these have been included in the section on "Castes and Communities" also for describing certain other aspects relating to them.

dualism. By this is meant the distinction between the independent Supreme Being (*Paramatman*) and the dependent principle of life (*Jeevatman*). There are, according to this school of thought, five real and eternal distinctions (*Panchabhedas*), namely (1) between God and the individual, (ii) between God and matter, (iii) between one soul and another, (iv) between the soul and the matter and (v) between one particle of matter and another. The Smartas derive their name from *Smriti*, the code of revealed or traditional law. They worship the triad of Brahma, Shiva and Vishnu. Philosophically, they hold the monotheistic Vedanta doctrine of *Advaita* or non-dualism; the supreme soul, called the Brahman, is the only existing being, the whole universe including both matter and spirit, being an appearance created by the Brahman with the help of *Maya*. The founder of the Smarta sect was Shankaracharya. The Srivaishnavas are worshippers of Vishnu, as identified with his consort, Lakshmi or Shri and hence their name. Their creed is called the *Vishishtadvaita* which reconciled devotion to a personal God with the philosophy of Vedanta by affirming that the soul, though of the same substance as God, can obtain bliss not in absorption but in existence with Him. The founder of this sect was Ramanujacharya.

Veerashaivism

Veerashaivism, as a faith separate from original Shaivism, was largely built on the writings and teachings of Basaveshvara, who lived in the twelfth century, and other Shivasharanas. The most important features of the Veerashaiva religion are what are known as *Ashtavaranas* and *Shatsthalas*. *Ashtavaranas* or the eight environments or coverings comprise the aids to faith and protection against sin and evil; they are: (1) obedience to a *guru*, (2) worship of *linga*, an emblem of Shiva, (3) reverence to the Jangamas or priests, (4) use of *vibhuti* or holy ashes, (5) wearing of *rudraksha* (seeds of *Cleocrapus ganitra*), (6) use of *padodaka* or holy water, (7) eating of *prasada* or consecrated food, and (8) *mantra* or the uttering of *panchakshara*, the five-syllabled formula 'Namah Shivaya'; some of these details are to be found in Brahmanism also. *Shatsthalas* may be popularly described as six stages of approximation towards union with Shiva; they are: (1) *bhakta*, (2) *mahesha*, (3) *prasadin*, (4) *pranalingin*, (5) *sharana* and (6) *aikya*, the last one meaning absorption with God. There are three degrees of manifestation of the deity, sometimes described as *Bhava-linga*, corresponding to the spirit, *Prana-linga*, corresponding to the life or subtle body, and *Ishta-linga*, corresponding to the material body or material *linga*.

Jainism

There are two main sects among the Jains, *viz.*, Digambaras and Shvetambaras. The *Yatis* form the religious order. The moral code of the Jains holds existence as divisible into two heads namely, *jeeva* (life) or the living and sentient principle and *ajeeva*

(inanimate) or the various modifications of inanimate matter. These are imperishable. Their philosophical tenet is designated *Syadvada* as one can neither affirm nor deny anything absolutely. *Dharma* is virtue and *Ahimsa* (non-violence) is the highest virtue. *Adharma* is vice. Their objects of worship are the Teerthankaras; they pay their devotion to some of the Gods of the Hindu pantheon also. There is a very small Jain population in the district, confined to Raichur and other towns and occupied in business avocations.

Islam

The essential Muslim beliefs are six in number, namely, faith (1) in one God, Allah, (2) in angels, (3) in the Quran, (4) in the Prophets, (5) in judgment, paradise and hell and (6) in the divine decrees. The five primary duties called the five pillars of Islam are: (1) repetition of the creed Kalimah, every day, (2) prayer, (3) fasting during the month of Ramzan, (4) the giving of alms and (5) pilgrimage to Mecca. Apart from Ramzan, two other principal feasts are the Bakrid and Shab-e-Barat. According to Islam, the daily prayer called the *Namaz* has to be performed five times a day. In addition to the usual *Namaz* of every day, special *Namaz* is held in the mosques every Friday and generally the Muslims make it a point to attend this prayer. Most of the Muslims in the district follow the Sunni faith. The main classes of Muslims in the district are Sheiks, Mughals, Pathans and Syedh.

Christianity

There are both Catholics and Protestants in the district. The Catholics believe in Father, Son and the Holy Ghost as comprising one Supreme. As followers of Jesus Christ, they owe their allegiance to the Holy Church founded by Jesus Christ and entrusted to Peter, the first Vicar (the Pope). His Holiness the Pope, who resides in Vatican city is the supreme religious head of the Catholics. Protestant Christians are those who follow the teachings of Jesus Christ as the Lord and Saviour and have faith in His death, resurrection and ascension. They believe in his second coming and judgment. They also profess faith in the Holy Trinity, Nicene creed and Apostles creed.

Religious movements

Among the new religious movements slowly spreading in the district, mention may be made of the Manikya Prabhu cult which seeks to synthesise old religious beliefs with modern ideas of simplicity. Its headquarters is at Humnabad in Bidar district and the cult is gaining ground in several parts of the district. Disciples give lectures on the efficacy of the cult and on the necessity of taking a practical view of old beliefs and faiths. The teachings of Sai Baba too are now getting to be more and more popular in the district. Small temples have been constructed to this famous saint in various places and people throng to them on Thursdays. There is no elaborate ritual of worship in these shrines and only flowers and camphor are offered. Lectures on

the philosophy and life of Sai Baba are heard with profound interest.

Language

The main language spoken in the district is Kannada. Telugu and Urdu are also spoken by some people, who are also quite familiar with Kannada. Urdu is spoken by the Muslims. Until recent times, it was the official language and the medium of instruction in the erstwhile Hyderabad State. Its influence was considerable and the educated people spoke it and did much of their work through it in those days. The Kannada language, as spoken in Raichur district, has many Urdu and Telugu words. The eastern part has contacts with the Andhra districts also and, as such Telugu is understood by some. Marathi is also understood in some trade circles since there has been always a trade connection in cotton and groundnut with Sholapur and Bombay.

A peculiar script called Modi, a form of Marathi-Balbodh script, was used by some of the Kulkarnis (village accountants). The script was used in their records and was perhaps existing from the time of the Peshwas. Though not a regular script as such, it was in some use in the day-to-day revenue affairs until recently.

The statement given below gives the distribution of population according to mother-tongues in the district as per the 1961 census :—

Language			Number
Kannada	..	..	8,46,835
Urdu	..	..	1,11,382
Telugu	..	..	1,08,909
Banjari	..	..	13,114
Marathi	..	..	7,143
Hindi	..	..	5,163
Tamil	..	..	4,461
Marwari	..	..	841
Korava	..	..	694
Gujarati	..	..	587
Konkani	..	..	373
Malayalam	..	..	373
Other languages	..	..	1,020

Castes and Communities

The scope of this section does not envisage a detailed description of each caste and community in the district. We confine ourselves here mainly to a general discussion of the traditional social structure, customs and religious beliefs. The following is a brief account of some of the castes and communities in the district.

Beda

The Bedas, also known as Valmeeki or Nayaks, are spread all over the district. It is said that some of the Bedas originally belonged to southern districts and came north in the 16th century.

They first settled in Adoni and came into the Raichur doab, partly through colonisation and partly through conquest. They were a martial community and the principalities that they established were politically important. Hunting and military service were their traditional occupations and now most of them are engaged in agricultural pursuits. In matters of inheritance, the Bedas follow the Hindu law of inheritance. In religion, they are divided into Vaishnavites (Valmecki) and Shaivites (Kannayya) and some have embraced the Veerashaiva faith. During marriage celebrations, some of them engage Brahmin priests and the others Veerashaiva priests. They are non-vegetarians. The Bedas have panchayats known as the *Kattes* and the head of a panchayat is called the *Kattemani* who wields his authority in religious and social matters. The Mangala Bedas are barbers while Chakala Bedas are washermen to the various Bedar sections and have, in consequence of their occupations, formed separate groups.

Brahmin

Among the Brahmins, the Madhvas are in great number. There are also other sub-sects of Brahmins like Kanva-Shakha, Prathama-Shakha and Srivaishnava whose followers are few in number. The Brahmins are spread over all the taluks. In Raichur town itself, there are about 300 houses of Brahmins. Nearly 75 per cent of the Madhvas in the district are adherents of the Uttaradi Matha, and the rest follow the Nanjangud Rayara Matha. The Smartas are not many in number and those who follow the Bhagavata Sampradaya are scattered in Koppal and Yelburga taluks. Except in Gangavati, where there are a few Srivaishnavas following the tenets laid down by Ramanujacharya, people belonging to this sect are not many in number. Some of the Brahmins were big land-holders. Inams and Jagirs were granted to them for rendering various kinds of services. The abolition of the Jagirs and Inams has resulted in their looking out for livelihood to different vocations and their number in the Government services and in private agencies is quite considerable. The joint family system is still in prevalence to a certain extent among the Brahmins in Raichur district.

The accepted form of marriage among the Brahmins is of the Vedic type with the attendant rituals. Five-day marriages are now a thing of the past. The evil of insistance on payment of the dowry is rampant in one form or the other among the Brahmins. In fact, a daughter of marriageable age means hardship for the parents of the girl and this is especially so when they belong to the middle and poor classes. The marriageable age for girls in the Brahmin communities is generally after 16, the boys marrying when they are between 20 and 25 years of age. Brahmin ladies worship also the *Basil* or *Tulasi* plant and the cow is held in great reverence.

Devanga is a Sanskrit word which means 'body of the God' and is applied to this caste which claims descent from one Devanga Rishi who, according to a legend, was created by Lord Mahadeva for the purpose of weaving cloths for Gods and men. The Devangas are scattered all over the district and some of them are Lingayats as already mentioned. In the Karnatak districts of the old Hyderabad State, marriage customs and ceremonies of the Devanga community closely correspond to those among other local castes. Weaving is the traditional occupation of the caste and they make a variety of textile fabrics. Some of them have given up their original occupation and taken to trade, agriculture, carpentry, masonry and other occupations.

Devanga (Koshti)

As in other districts, the weavers have a number of sub-sections; and though they are noted for their industry and diligence, they are now seldom able to earn a good living on account of the competition from cheap and more attractive mill-made cloth which is readily acceptable to the masses of the people. Many of the weavers have been compelled to give up their traditional profession and betake to other pursuits. Thus, we find that today some of them are agriculturists; others are farm labourers, personal servants and shop-keepers; in short, they follow any occupation that gives them a livelihood and that does not detract them from their ideas of social purity.

Kapu

The Kapus are cultivating castes. The spread of Veerashaivism saw the conversion of many of the Kapus into Lingayats. The Imperial Gazetteer of India (1909)—Provincial Series—Hyderabad, p. 27—says: "The most numerous caste in the district is that of the cultivating Kapus, numbering 72,900, of whom 53,900 are Lingayats".

Kuruba

Sheep-rearing and blanket-weaving has been the traditional occupation of the Kurubas. But now a large number of them follow agriculture. There are three endogamous divisions among them, namely, Hattikankana Kurubas (*i.e.*, those who wear bracelets of cotton thread at a wedding), Unnikankana Kurubas (*i.e.*, those who wear wedding bracelets of wool) and Lingayat Kurubas. Mallaiah is their chief deity while Beerappa is their chief *guru*. Divorce and widow re-marriage are permitted among them.

Lingayat

The Lingayats or Veerashaivas are a predominant community in the district of Raichur and are spread all over the district. The Veerashaivas are sub-divided into Lingayat-Vokkaligas, who are primarily engaged in tilling the land, Banajigas whose occupation is trade and many other occupational groups. Amongst the Lingayat-Vokkaligas come three other different classes, the Kuda-Vokkaligas, Pakanaka-Reddies and Hande-Kurubas. Among the Banajigas are several sub-sects like the Sheelawant,

Lokavant, Panchamasale and the Adi-Banajiga. The great reformation movement initiated by Basaveshvara brought into the Veerashaiva fold many functional communities, such as Koshtis (Hatkars), Jyandras, Raddigalu, Kumbararu, Ganigaru, Simpigaru, Nayandaru. Agasaru, etc. The Lingayat Reddies are largely agriculturists by profession. The Hatkars and Jyandras have weaving as their traditional occupation. The former, in common with the Devanga caste, have Choudamma as their tutelary deity. Among Jyandras, also called Jarads, there are three endogamous sub-divisions. The main deity of the Jyandras is Veerabhadra. The Kumbaras are potters who are divided as Deekshawant and Sheelawant, while Ganigas are oilmen by traditional occupation. The latter have three hypergamous sub-divisions, namely, Deekshawant Sheelawant and Rasawant. There are also Lingayat Panchalas belonging to the five artisan classes. The Lingayat Simpis (tailors and cloth merchants) have two endogamous sub-divisions, namely, Nagleek Simpi and Shiva Simpi, while the Lingayat Nayandaru (barbers) have two hypergamous sub-divisions, *viz.*, Sheelawant and non-Sheelawant. They claim descent from the followers of Hadapada Appanna who attended on Basaveshvara and other Sharanas. The Lingayat Agasas (Dhobis or washermen) claim to be descendants of the followers of Madiwala Machayya, a noted disciple of Basaveshvara. The caste and sub-caste rigidities are now slowly disappearing and inter-sub-caste and inter-caste marriages are taking place. Being included in the fold, these occupational groups hold the same status as the other Lingayats. All Veerashaivas pay the greatest respect to the Gurusthala Viraktas who are un-married and lead a celibate life. The constitution of the Veerashaiva community is based on *Panchacharas* with observance of the tenets of *Shatsthala* and *Ashtavaranas*. The *Panchacharas* are: *Lingachara*, *Sadachara*, *Shivachara*, *Ganachara* and *Bhrityachara*. The *Guru* or Jangama, with his *Sthira* or *Chara patta*, attends to the religious ceremonies and he is held in high esteem by the whole Veerashaiva community. The Veerashaivas rever and practise the *sampradayas* of *Basavadi Pramathas* with great devotion. Corresponding to the *Sanyasis* of the Brahmin order, the Virakta Jangamas practise rigid asceticism and command the veneration of the community.

Marriages amongst the Veerashaivas, as among others, are arranged generally by the parents of the parties. The celebrations in the old days usually lasted for about five days, but conditions of modern life and modern economy have been responsible for cutting down the number to just about two days. During the marriage celebration, the worship of Veerabhadra is important among some sub-sects. The actual wedding is performed on a platform with *Panchakalashas* or five brass pots with water and coconuts in their mouths, with Vedic rituals excluding *Homa*, etc. The marriageable age for girls amongst

the Veerashaivas is ordinarily about 16 o 18. Boys are usually married when they are between 20 to 23 years old. Widow re-marriage is not uncommon amongst the Veerashaivas. There is a dowry system prevalent now amongst some of the Veerashaivas, in some form or other, though it is said that this was not in vogue in the old days. The Veerashaivas in general are vegetarians.

The joint family system was generally prevalent among the Lingayats in the old days, but the efflux of time has seen changes in this respect also, as in other spheres. They worship everyday *Ishtalinga,* wearing it in a small silver box on their body. The passage of time has not affected their sense of strict devotion to religious tenets, and they lead a very social life.. It is this that has kept the community free from disruption, enabling it to function as a well-knit unit occupying an important place in the social, cultural and economic life of the district. There are several Veerashaiva monasteries called Mathas in Raichur district. Of these, the Bichale Channaveera Shivacharya Matha in Matmari is the biggest. Another Matha of importance is the Somwarpet Rayachoti Matha. The Chikkasugur Matha has also a considerable following. The Kille Matha in Raichur city is also a fairly important institution. These Mathas conducted schools and were responsible for promotion of education in this part of the country during the last several centuries. Among the important Veerashaiva fairs are the Amareshwara Jatra at Lingsugur and the fairs held at Devarsugur, Chiksugur and Narada-Gadde.

Muslim

The largest number of Muslims in the district are to be found in Raichur city and at Mudgal and Koppal. In the rural areas, their main occupation is agriculture and weaving. As a matter of fact, most of the Muslims, who are now engaged in agricultural and allied pursuits, dress in the Hindu fashion and speak fluent Kannada. In the urban areas, Muslims who are educated are in Government and other services. Some of the more enterprising among them have started private business ventures and some are artisans. In the days of the Nizams, many of the Muslims were known to be very extravagant in their habits and customs. At Raichur there are two big mosques—the Jumma Masjid in the Saraf Bazaar and the Osmania Masjid in Teen-Kandil.

Occupational groups

Among the occupational or functional groups are the Bhois or Bovis, who are engaged in fishing, plying of boats and agriculture, the Medars engaged in the making of baskets and mats, the Dhobis (Agasaru) or washermen, the Darjis or tailors, Kumbaras or potters, the Hajams or barbers and the Mochies or cobblers. The religion of the Bovis is a mixture of orthodox Hinduism and animism. Their favourite deity is Gangamma or the river

goddess worshipped by the entire community in July-August when the rivers and streams are full. Their tutelary deity is Vyankatarama, who is worshipped especially on Saturdays, with offerings of flowers and sweetmeats. They are not vegetarians but they abstain from pork. Many of them have lost their original occupation of fishing and have become domestic servants in Hindu and Muslim households or taken to agriculture. Palanquin-bearing was an old occupation of theirs. The Medars are mostly Veerashaivas and some of them have also special reverence to God Venkateshvara. The Dhobis are divided into many endogamous groups. A few others have animistic beliefs.

The traditional occupation of the Idigas is toddy-tapping. Some of them are also employed in household and other services; a few of them possess lands and are farmers. The Gollas are a pastoral caste. Some of them have taken to agriculture and trade. There are also Jain tailors and Vaishnavite tailors. The Kumbaras are divided into several sects. Some of them are Lingayats. The barbers are in demand not only for purposes of tonsure but also on occasions of marriages when they engage themselves as musicians playing the pipe, etc. Their religion corresponds with that of the cultivating castes who follow both the Shaivite and Vaishnavite doctrines. The Mochis in the district are called Samagars or Chamagars; evidently, these terms are derived from *Charmakara*, the Sanskrit word for a worker in leather. The Mochis are mostly *Vibhutidharis*, *i.e.*, Shaivites, but they also worship the goddesses of small-pox and cholera. They claim their descent from the famous Shivasharana, Madara Channayya.

Panchals

The Panchalas, who comprise five artisan classes, engage themselves in work on the five media, gold, brass or copper, iron, wood and stone. Their work obtained for them a high position in the early days and it was fostered by generations of skilled men. From father to son, they devoted themselves to creation of fine objects of art. "In the carving of wood and the chasing of metal and filigree work, they excel their brethren of other countries. Specimens of their work were purchased for the exhibition of 1851 as models of tasteful design and careful work and introduced into the Schools of Arts of Europe for imitation."* Want of proper encouragement accounted for the decay of the work of these artisans and many of them were forced to take to other occupations. Some of them have distinguished themselves in the learned professions and quite a few, particularly goldsmiths, have become affluent landlords or merchants.

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* "The Castes and Tribes of H. E. H. the Nizam's Dominions" by Syed Siraj-ul-Hassan, 1920, p. 552.

Scheduled Castes

The Scheduled Castes comprise the Mangs, Mahars, Holeyas, Madigas and others (*see* elsewhere in this chapter). Agricultural and other labour, shoe-making and cultivation have been among their main occupations. They worship the various gods of the Hindu pantheon, Maruti or Hanuman, Bhavani or Durga and Mahadeva or Shiva being given special prominence in their day-to-day worship. They have also some animistic beliefs and the goddesses of cholera and small-pox are also worshipped, especially during the periods when these pestilences are prevalent. For their marriage and religious ceremonies, they engage Veerashaiva priests. At the time of Basaveshvara, they were given a social status and were allowed by him into the Veerashaiva fold.

Conditions of life among these Harijan castes were until recently deplorable, but legislation and social reform in favour of them have been responsible in a large measure for ameliorating their conditions and they are now steadily forging ahead and beginning to occupy their rightful place in society.

Uppara

The original occupation of the Upparas was salt-making. *Uppu*, which means in Kannada salt, denotes their former occupation. Now they have taken to agriculture, earthwork, lime-burning, daily labour and the like. They are scattered all over the district. The caste is divided into several sub-castes. Their favourite deity in general is Venkataramana. A section of them professes Veerashaivism. Widow re-marriage and divorce are permitted among the Upparas. Formerly, some of the Upparas were noted for wrestling feats and other physical exercises.

Vodda

Excavation of stone from quarries, stone-cutting and working in earth have been the traditional occupations of the Voddas. They have three endogamous sub-divisions, namely, Kallu Voddas, Mannu Voddas and Uppu Voddas and several exogamous sections. Many of them are also engaged in masonry work, well-sinking, agriculture and allied pursuits. They have ample employment opportunities in the various development works. They worship Venkataramana, Kanakaraya, Huligamma, Malleshvari and other deities. Widow re-marriage and divorce are permitted among them. They have also caste panchayats.

Vysya

The Vysyas are found in a fair number in the district and their main occupation is trade. The Vysyas on the western side of the district are called Kannada-Vysyas, while those settled in the eastern portions are called Telugu-Vysyas. Many of them are punctilious in the performance of their religious duties. They follow both the Shaiva and the Vaishnava *sampradayas*. Worshippers of Vishnu are called *Namadharis*, and the devotees of Shiva are designated *Vibhutidharis*. The marriage rites among

the Vysyas conform to the Vedic pattern. The dowry system is prevalent to a certain extent among them in some form or other.

Social life

The joint family system so characteristic of the Mitakshara law of inheritance was predominant among the Hindus of the district till very recently and even today quite a few households accept this system unquestioningly and give due respect to the accepted head of the family. Ownership of large extents of lands was one of the reasons for the existence of joint family system. But changes in the pattern of society and the new laws of inheritance have been responsible for the splitting up of families. This process was accelerated by the abolition of Jagirs and Inams which gave a vigorous jolt to the old system. There is now a perceptible tendency among the propertied families to get themselves partitioned out as early as possible, and one of the reasons for such haste may be ascribed to the prevailing uncertainty in regard to ownership of land.

At Yerdona in Gangavati taluk, a typical village of the district, it was found that out of 303 families in the village, 88 were joint families, 131 simple families, 70 intermediate families and 14 were other families.* The Hindus follow the main Hindu law in matters like succession, partition, privileges of minors, etc. The new law gives equal rights to the son and the daughter, in the event of the owner dying intestate. The impact of this is being felt in the district and signs are not wanting of big property holders settling the question of inheritance through wills. But, by and large, the vast changes in the pattern of Hindu law have not been unwelcome in the district. The Muslims are governed by the Muslim law.

Marriage and morals

Records of the old times reveal the existance of the system of polygamy among the Hindus in the district. It had continued to be in practice until recently. The Hindu Marriage Act of 1955 put an end to this system, which was already disappearing, and marked a milestone in the onward march of the Hindu society. It was almost a fashion for affluent men, till recently, to acquire several wives. Polygamy is, however, prevalent among Muslims. Among many sections in this district, widow remarriage is common. This marriage is called *Udike* as against the regular marriage which is called *Maduve*. The re-married widows among some sections do not, however, hold the same status in the society as the woman whose first husband is living. Among the orthodox Hindus, divorce is not generally in practice. Among some other castes, it is in vogue. It can be brought about at the instance of either party for infidelity or other serious reasons. According to the Hindu Marriage Act of 1955, divorce is granted on certain specific issues to be determined by courts.

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* Census of India-1961, Vol. XI, Mysore, Part VI, Village Survey Monographs, No. 10, Yerdona Village, p. 78.

In respect of marriage alliances, there are many restrictions among the generality of castes. A man must not marry outside the limits of his caste and if he is a member of a sub-caste, he may not marry outside the particular sub-caste. The rule that the bride and the bridegroom should not belong to the same *gotra* (sept) prevails among Brahmins and several other castes. Side by side with these restrictions, there exists a custom which allows marriage among some relatives. The practice of a man to ask for the hand of his sister's daughter either for himself or for his son is widespread among the castes. Among Kurubas, Agasas, Kumbaras and Idigas, it is the right and duty of the maternal uncle to cut the *kalli* plant required for erecting the marriage *mantap*. Among certain sections, the duty of tying the *bhasinga* to the bridegroom's forehead and of bringing the bride to the marriage pandal lies on the maternal uncles. Marriage between cousins is not prohibited among the Muslims. But, a person cannot marry his sister's daughter. A man may not marry his wife's sister during his wife's life-time unless she has been divorced.

Marriage ceremonies

Among the generality of castes, the marriage rituals are now simplified. Instead of five days, the marriage celebrations are completed now in two or three days or even in one day. Usually, the marriage takes place at the bride's place. Among a section of the Harijans, the marriage takes place at the bridegroom's place. Among most castes, the marriage ceremonies include, *inter alia*, the planting of the Indian coral tree (*halagamba* in Kannada). This pole is decorated with saffron, chunam and green leaves; four pots are placed in a square near this pole and a thread is passed round them. Within the enclosure so made, the pair are bathed together and then dressed in new clothes. A part of the thread wound round the pots is taken, dipped in saffron and then tied to the wrists of the couple. The priests invoke divine blessings and the *thali* or *mangalasutra* is tied to the bride's neck and all the people present strew reddened rice on the couple. The wedded pair eat out of the same leaf-platter, a ceremony which is called the *bhooma*. The relations and friends present are feasted. (*See* also under 'Castes and Communities' elsewhere in this chapter).

Among Muslims, two or three days before the actual marriage, both at the houses of the bridegroom and the bride, a number of earthen pots are arranged in a booth in front of the houses or in the inner apartments. On the eve of the marriage, the bridegroom's party goes in a procession carrying in trays sweetmeats, dried fruits, ornaments and articles of dress for the bride. The party goes back with the trays refilled with clothes for the bridegroom. Dressed in his wedding clothes and with a *sehra* (flower sheet) fastened round his head and followed by relatives and friends, the bridegroom arrives at the bride's place. The

Kazi asks the bride's representatives whether she accepts the bridegroom. When told she will have him, he takes a declaration of two witnesses. He then puts a similar question to the bridegroom and obtains his consent. The proceedings are recorded. The *Kazi* then reads out the *nikha*.

The Christians celebrate their marriages in the church. All arrangements for the wedding are made in the bride's house. It is the duty of the parish priest or any other religious authority superior to him to conduct the marriage. After the marriage service is read, the bridegroom and the bride are asked whether both agree to the union. The marriage is then solemnised.

Position of women

The position of women in society is one of economic dependence on the menfolk, as elsewhere in the State. About eighty per cent of the girls of the higher classes read upto the secondary school standard and then prepare themselves for a career as wives and housekeepers. Very few go to colleges, and such of them as do sometimes engage themselves in some useful social service in addition to their duties as wives and mothers. A few become teachers. Generally speaking, the women have no independent means of livelihood. A few among the Christian community have become trained teachers and nurses; but the sight of women working in offices or private business establishments, a feature becoming increasingly common in bigger cities, is almost absent in Raichur district.

But the picture is different when we take into consideration the uneducated women belonging to the lower classes of society. Barring Brahmins, Muslims and well-to-do families of other castes and communities, many of the women belonging to the labour classes work along with their menfolk for supplementing the family budget. Their activities comprise work in the fields, ginning and pressing factories, and in certain trade centres. Generally, girls begin to work when they are 14 or 15 years of age and go on till old age prevents them from doing any more work. They are active helpers to their menfolk and their earnings contribute substantially in the effort to keep the family pot boiling.

Special features

A refreshing feature of social life in the district is that the old-time habits of reverence to elders and obtaining guidance from them in all matters have not died out. Even to-day, the elders are regarded with high esteem and their advice often sought by the younger members of the family, and this is true of all communities. The passage of time has not occasioned disrespect to the older members of the community or disregard of the advice given by them in matters of day-to-day life. The reason for this is not, perhaps, far to seek. The influence of Basaveshvara and other Shivasharanas, who spread their message

of correct conduct in life, has been great, not only among the Veerashaivas but also among members of other communities, inasmuch as the catholicity of his teachings had its appeal for all. Raichur district has been also the birth-place of some of the most famous Haridasa exponents of the Bhakti cult, like Jagannatha Dasa, Gopala Dasa and Vijaya Dasa who incessantly spread the message of supreme devotion to the Almighty and who poured forth their music to make the people realise the importance of Bhakti in every-day life. It is due to the profound influence of the Sharanas and Dasas on the people of the district that we find that the cardinal virtues of piety, devotion, charity and goodwill still continue to shine like beacon stars.

An instance of the continuing faith, among the people, in old-time traditions of reverence and the value of human companionship, is the custom, still being practised in Raichur district, of distributing marriage invitations personally from house to house, accompanied by music and the distribution of *pan supari*. The bride's party carries the invitations for the wedding, meets the heads of the families to whom the invitation is personally and respectfully handed and makes obeisance by offering fruits, flowers and betel leaves. An oral invitation is then made to the elders requesting them to grace the marriage with their presence and bless the couple. Exigencies of a modern age may perhaps indicate the mailing of these invitation cards by post or sending a messenger round for distributing them. But Raichur seems to have realised the importance of keeping alive the graces of an age that is fast disappearing.

Social evils

Prostitution has been a profession as old as human society and is pursued in cities and towns almost all over the world. The Suppression of Immoral Traffic Act has been, doubtless, in force but actual attempts at checking the evil do not seem to have been very successful. Some crowded parts of Raichur and other towns have many houses of ill fame. In the old days, this evil profession which was confined to a community, was considered also as an artistic profession giving some scope for development of music and dancing The Kalavantis, in special, made excellent dancers and musicians and their performances were almost indispensable to the rich and the luxury-loving classes. Even now there are some of them in places like Raichur. Added to this, is the evil of drink which is fairly wide-spread among several sections of the people. The abkari revenue is roughly estimated at Rs. 87 lakhs and is indicative of the extent of the evil. The poorer sections spend much on country liquor and the more affluent sections of society on foreign drinks. In the wake of inebriation and prostitution comes the other evil of gambling; Raichur district seems to have its share of this also. Efforts on the part of the authorities to put down such evils have no doubt been yielding some success, but rather slowly, obviously because

the clandestine nature of the transactions makes it difficult to track the offenders.

Home life

In 1961, there were 2,15,673 houses in the district, while the number of households was 2,20,863. This worked out to about 40 houses or 41 households per square mile, while the average number of persons per household was five. The rural and urban break-ups of these particulars are as follows :—

—		No. of houses	No. of households	Average No. of houses per square mile	Average No. of households per square mile	Average No. of persons per household
Rural	..	1,84,374	1,87,678	34.50	35.12	5.01
Urban	..	31,299	33,185	342.44	363.08	4.84

Rural Housing.—The people in many villages of the district live mostly in houses built of mud with the roofing also in mud. The walls are raised by heaping mud layer after layer and levelling the sides with a wooden leveller. In the eastern parts of the district, palm leaves and stems are used for roofing and are found to be quite useful in reinforcing the mud roofing. In the western parts of the district, cotton stems are used instead of palm stems, which serve as rafters on which the mud is heaped and levelled. As elsewhere, houses in the rural areas are built with scant respect for sanitation and hygiene : most of them are ill-ventilated and often lack of elementary amenities like drains for waste water. Usually, each house has two doors, the house itself comprising about two partitions, with three or four rooms, one of them serving as a kitchen. Often, the rooms are built round a courtyard. Recent years have, however, seen the construction of a better type of housing, with brick walls and a roofing of reinforced cement concrete. Each village can boast of one or two such houses belonging naturally to the richest persons in the village. Some of the villages in the western parts of the district have ruined stone walls encircling them ; these are perhaps the vestiges of a time when the householders had to protect themselves as best as they could from depredators.

Some of the villages have a large number of houses built with stone and these are generally owned by the big landlords, merchants and money-lenders. The roofing is however of mud. These houses have more accommodation than the mud houses and have three or more rooms besides a hall, a kitchen and a bathroom. Of course, cattle live in enclosures very near the house and add to the insanitariness of the houses. Many

villages are located near small streams and in river valleys. When there is no other water supply, wells are the only source. Each village has a couple of step-wells and the summer season witnesses a period of water scarcity in many of the villages. The lanes and by-lanes can, by no stretch of imagination, be called roads and meander according to the haphazard building pattern. Most houses are on road level. Fields round about the village are used for calls of nature and in many of the houses there are no latrines. The scheduled classes generally live in a separate group of huts called *jopadis* and have their own wells or water sources. Generally, each village has a temple of Hanuman at or near the entrance. The entrance itself is called *agase*. Almost all villages have *chavadis* which serve to house the offices of the headman and accountant and are also used for purposes of public assembly. Many of the villages have a Veerashaiva Matha which serves as a centre of social activities.

Urban Housing.—Houses in the towns do not differ very largely from the pattern of rural houses, except that most of them are stone-walled and have more accommodation. These houses have spacious rooms, a verandah and a separate block for the kitchen and bathroom and some of them have an upstairs portion also. In addition to mud-roofing, tiled houses are becoming common. The use of stone slabs for roofing is also popular. Modern concepts of house-building are gradually gaining ground and in Raichur town itself, on the Railway Station road, there are a few structures conforming to what may be called the American cottage type. The Sat-Kacheri, where the District Offices are located, is built of brick and presents a modern frontage. The Inspection Bungalow, the District Police Office, the houses belonging to the workers of the Transport Department and some of the structures in the new housing colony adjacent to Rajendraganj are examples of modern construction. Inside the Raichur fort area, particularly in Somwarpet and Gajgarpet, a number of stone houses without verandahs or open spaces may be seen huddled together. It is almost impossible to sleep indoors in many of the houses during the heat of the summer and it is common, during these months, for the inmates to come out in the nights into the open to sleep.

Houses in the towns have some furniture in the shape of chairs and cots. A very few houses in the villages have these. The *charpoy* is as familiar a sight in the towns as in the villages. Generally speaking, houses in the urban areas also do not possess any large or attractive furniture. Most of the people sit on carpets or mats spread on the floor and use bolster pillows to rest their backs. The influence of the *purdah* system prevalent in the old Hyderabad State seems to be still strong and though the several communities, except the Muslims, do not observe *purdah*, they have generally separate quarters or rooms for men and

women; we do not usually see women when the men gather in a room to have a chat. Some of the houses have a room set apart for worship and a few have strong rooms to keep an iron safe.

Food habits

The staple food of the people is jowar. Jowar is ground into flour and made into cakes (*rotti*) which are eaten with condiments and vegetables. The poor sections of the community, who cannot afford vegetables, eat the jowar flour cakes with chutney. The vegetarian food consists mainly of jowar bread or wheat *chapatis*, rice, vegetables, ghee, pickles and *happalas* and curds or butter milk. People have generally two principal meals a day, one just about noon and the other in the late evening. The night meal is also similar except that the menu is slightly lighter. Festivals and other days of rejoicing see the preparation of special dishes, both sweet and savoury. In addition to principal meals, they take a breakfast in the morning and tea or coffee in the evening. In the rural areas, those who are engaged in manual labour, generally take three meals, in the morning, at mid-day and in the night. Except the Brahmins, Lingayats, Vysyas, Jains, etc., most of the other communities eat also meat and fish. The Hindus eschew beef and the Muslims pork.

Dress and ornaments

The usual traditional dress of men consists of a *dhoti* worn in the *katche* style, a full or half shirt, a coat, an *anga-vastra* called *shalya* and a head dress consisting of a turban tied round the head. The younger people wear often a cap. The dress pattern of women also follows traditional lines. A tight-fitting bodice called *kuppasa* and *seere* or saree are worn. The latter end of the saree, among the generality of castes, except the Brahmins and some other castes, is taken over the head. Among some Brahmin sects, particularly among the Madhvas, the saree is worn in the *katche* fashion. Girls, before they come of age, wear a skirt and a bodice. Boys wear a shirt and shorts. Men working in administrative and business offices wear a pair of trousers and a bush-shirt and sometimes a coat. The sultriness of the climate makes it essential for the people to go in for lighter types of clothing. The well-to-do go in for silk and other costly fabrics, while the middle and the poor classes wear cotton clothes.

The practice of wearing heavy and old-fashioned ornaments has given place to that of light ornaments. The old-fashioned *nagamuragi, gejji* and *vanki* have almost disappeared. Women wear simple gold necklaces, small ear-rings and nose-studs either made of gold or set with precious stones, light gold bangles and rings. Silver ornaments are common in the rural areas. The wearing of the silver anklet is, however, going out of fashion.

Communal life

The stresses and strains of modern living and a growing tendency among the people to sneer at old-time amusements and recreations have been responsible for the slow decay of most of the folk arts of the districts. But even to-day, especially in the rural parts, some of these exercise a profound fascination for the people. The Lambani dance and another called the hand-clapping dance are still popular, and no important public function in many of the villages is complete without an exhibition of these picturesque and beautiful dances. Village dramas, called *Bayalata*, are also very popular and draw large audiences. These are generally staged in the open air, an improvised dais serving the needs of the actors. Stories from the epics and the *puranas* are the common subjects and the actors wear costumes. Music is an invariable accompaniment. The language used is sometimes rather crude, but often serves to animate the audience to high and vociferous appreciation. The drama is acted almost throughout the night and gives an opportunity to the villagers to relax after the day's toil. There are also sometimes *keertana* performances.

During festivals, some persons from the villages go out hunting. The days when they could hope to bag some decent game are gone but they still go ahunting and are mightily pleased if they can get a hare or two. The Yugadi festival day and the Dasara season are times when the villagers deck themselves out in all their finery. There is an atmosphere of mirth and jollity all round and the prevailing hospitality of a bibulous variety is lavish. On the occasion of *Kar Hunnime* festival, oxen are decorated and are made to run through the *Agase* of the village. *Gauri-Hunnime* is a big festival for women. Basava-Jayanti, the birthday of Sri Basaveshvara, is celebrated with eclat, so also most of the other Hindu festivals.

In some places of the district, pigeon-flying is a favourite pastime. Pigeons belonging to different persons are brought along with the necessary identifications and are made to fly long distances. Betting runs high and small fortunes are made or lost during these races. Ram fights too are popular in some parts of the district and there are people who specialise in breeding fighting rams. These furious butting animals go at each other in a terrific spirit to win and, as usual, frenzied excitement prevails among the crowd. Heavy wagers are laid and sometimes large sums are made, but the villager has had his relaxation and does not mind paying for it.

The passage of time has seen some of the traditional amusements go into desuetude and replaced, especially in the urban areas, by modern games like cricket, football and hockey and indoor games. Volleyball is very popular in the district and

one of the players, Sri Thimma Reddy, is a national champion in volleyball. There are also several indigenous games like *kabaddi*, *uppinata*, *phani-chendu*, *lagge-chendu*, *tilli-belli* played by boys and *chappale-ata*, *kolata*, *kuntata*, etc., played by girls. Kite-flying and *bugari-ata* are also popular with children. Each taluk headquarters has a recreation centre or club where the modern games are played. In places where important offices are located, the employees have their own clubs for spending their leisure hours. The Officers' Club at Raichur is well-patronised by officials and non-officials alike.

Wandering minstrels go all over the district singing *bhajans* and reciting *vachanas* and songs composed by the famous Sharanas and Dasas. These have a considerable effect on the people in general, inculcating in them a sense of devotion to God and the need to realise Him through *bhakti*.

Music

Raichur and Adoni (now in Andhra Pradesh) were at one time big centres of Karnatak music. The popular taste later veered towards Hindustani music and the importance given to classical Karnatak music lessened. Even so, till recently, celebrated musicians from South India used to visit Raichur often to give performances, which drew large audiences. The name of Sangeeta Rajanna, whose proficiency in music was great, is a household word in the district. Several music-loving public men like the late Sriyuts P. Krishna Rao, Madhava Rao and Kakadki Srinivasachar formed a music circle to propagate and popularise both systems of music and their efforts in this direction were noteworthy and were widely appreciated. Raichur may also be said to be one of the centres of Sharana Sahitya and Dasa Sahitya, the district having been the birth-place of several famous saint-composers. Their compositions are sung with fervour even to-day and an effort is being made to popularise them both in the Karnatak and Hindustani styles. (*See* also Chapter XV).

Pilgrim centres and Jatras

One of the most important pilgrim centres for the Hindus in the district is Narada-Gadde, which is about fifteen miles from Raichur. It is surrounded by the Krishna river and the place is held sacred. The annual fair held in the month of *Phalguna*, *i.e.*, about March, attracts thousands of pilgrims.

Kurugadde near Devarsugur is a well known festival centre for the Smartas. The place is an island in the Krishna river course where a temple is built. The presiding deity is Sripada Srivallabha. Pilgrims visit the place all the year round. Jitamitragadde, another island in the river course of the Krishna, is a sacred place for the Hindus who visit the place all the year round for a holy bath.

Manvi is a place of pilgrimage for Hindus where several fairs and festivals are held, the chief of which are Karemma Jatra held

about January for two days, the Yellamma Jatra held about February for seven days, the Mahamalleshappa Jatra held usually about January and the Sanjeevaraya Jatra held about December. Manvi is also the birth-place of Jagannatha Dasa who spread the *bhakti* cult.

The Amareshwara Jatra in Lingsugur taluk, which is held for three days about the month of March, attracts a large number of persons. This fair is held at Devarbhupur and is highly popular with the Veerashaivas of the district. The Kadlurayya fair at Kadlur held in the month of *Margashira* about December attracts a good number of people. The Adavirayanagudi Jatra at Kushtagi held about the month of June lasts for 10 days when thousands of Hindus gather there to offer worship. Hanumanji Jatra at Balganur, Sindhanur taluk, held in *Vaishakha* about May, lasts for three days. The Gavisiddheshwara Jatra at Koppal held about the month of January for 11 days is the biggest in the taluk. A cattle show is also held as an adjunct to the religious fair. The Kanakgiri fair in Gangavati taluk held about the month of March lasts for two days. The Mangaleshwara *jatra* at Mangalur in Yelburga taluk is held about the month of February and lasts for five days.

The Syed Shams Alam Hussainali *Urus* held about August is a great Muslim festival. Muslims from all over the district and also from outside congregate at Raichur on this occasion to offer prayers.

Funerals

The Brahmins, Vysyas, Rajputs, Banjaras, etc., cremate their dead persons, while other castes and communities mostly bury their dead. While corpses of children among the former group are buried, those of pregnant women among many others are burnt. Occasionally, the aged and respected among some Harijans are also cremated. The Lingayats bury their dead in a sitting posture. Among the Muslims, the dead are buried in a lying posture with the face towards the west. The customs or ceremonies relating to death among the Kurubas, Upparas and many others are similar to those of the Lingayats. The generality of castes observe a simple anniversary for all the dead in the family on the *Pitru Amavasya* day, *i.e.*, the last day of the month of *Bhadrapada*. Mourning is observed generally for about ten days. The death ceremonies among the Brahmins are elaborate.

CHAPTER IV

AGRICULTURE AND IRRIGATION

THE Raichur district lies in the northern *maidan* region of the State, comprising vast fertile tracts of black cotton soils. It is bordered by perennial rivers, the Tungabhadra and the Krishna, and is traversed by a few small streams providing a vast irrigational potential. It had some irrigational facilities through the old Vijayanagara channels. But the district remained essentially backward in agriculture till the beginning of the last decade, *i.e.*, till the placid waters of the Tungabhadra flowed down the Left Bank Canal, heralding a new era of prosperity and progress for the district. The scanty and uncertain rainfall of less than 24 inches and frequent visitations of famine, in addition to the lack of initiative on the part of the farmers and lack of encouragement from the feudal regime, had greatly retarded the agricultural industry. In recent years, great improvements have been introduced, in the country, in the methods and practices of this basic industry, encouraging the farmers to follow their profession with greater success and confidence than ever before. This is particularly so in this district, thanks to the mighty Tungabhadra Project.

Agricultural population

The dominant feature of this district's economy is that it is primarily dependent on agriculture, which is the chief occupation of the people as in the other contiguous districts which are all predominantly agricultural in character. Nearly seventy-seven per cent of the population of the district derive their livelihood directly or indirectly from agriculture. In 1951, the number of owner cultivators was estimated at 5,59,302, making up 58.6 per cent of the total population of the district. The number of tenant cultivators was just over 41,000, constituting 4.3 per cent of the population. The number of cultivating labourers was 94,377 and the number of non-cultivating owners 42,126. The total agricultural population of the district was estimated to be 7,36,984, which constituted 77.3 per cent of the total population.

As per the 1961 Census, the total population of 11,00,895 in the district was classified into 5,12,061 workers and 5,88,834 non-workers, the workers being further classified under nine categories

according to economic activities. Among these workers, 3,92,508 persons were engaged in agriculture and this number included cultivators and agricultural labourers, while 1,19,553 were pursuing other economic activities. So far as this chapter is concerned, only workers engaged in agriculture need be taken into consideration. The total number of persons working as cultivators and agricultural labourers (*i.e.*, 3,92,508), constituted 76.7 per cent of the total working force and 35.6 per cent of the total population of the district. The table given below shows the distribution of agricultural population by taluks :—

Sl. No.	*Name of taluk*	*Number of cultivators*	*Number of agricultural labourers*	*Total of columns 3 and 4*	*Percentage of column 5*	
					to total working force	*to total population*
1	2	3	4	5	6	7
1.	Deodurg ..	25,363	7,560	32 923	6.5	3.0
2.	Gangavati ..	28,891	11,606	40,947	7.9	3.7
3.	Koppal ..	34,074	13,313	47,387	9.3	4.3
4.	Kushtagi ..	31,816	8,119	39,935	7.8	3.6
5.	Lingsugur ..	44,589	9,752	54,341	10.7	5.0
6.	Manvi ..	29,823	17,987	47,810	9.4	4.3
7.	Raichur ..	24,064	15,969	40,032	7.7	3.6
8.	Sindhanur ..	30,218	8,094	39,212	7.6	3.5
9.	Yelburga ..	38,582	11,789	50,371	9.8	4.6
	District's total ..	2,87,420	1,05,088	3,92,508	76.7	35.6

It can be seen from the above table that the total number of persons working as cultivators and agricultural labourers in Lingsugur taluk accounts for the largest percentages of 10.7 and 5.0, while Deodurg taluk the lowest of 6.5 and 3.0 to the total working force and the total population of the district, respectively.

Size of land holdings

The pattern of land distribution in the district may be said to be broadly similar to that in other parts of the State, which is characterised by "numerous small holdings, a large portion of them un-economic, a small number of middle class peasants and a sprinkling of substantial owners". As per the report of Mysore Tenancy Agricultural Land Laws Committee, 1958, the extents of

lands cultivated in the district by various land-holding groups were as detailed below :—

Sl. No.	Land-holding group (in acres)	Number of holdings	Total area (in acres)	Percentage
1	2	3	4	5
1.	0—5	48,269	1,46,576	5
2.	5—10	49,532	3,76,757	12
3.	10—15	33,066	4,05,291	13
4.	15—30	42,882	9,02,573	30
5.	30—45	12,707	4,03,601	15
6.	45—60	4,533	2,34,579	8
7.	60—75	2,068	1,40,921	5
8.	75—100	1,658	1,44,660	5
9.	100—150	808	97,257	3
10.	150—200 .. .	211	35,582	1
11.	200—300	102	25,105	1
12.	300—500 . ..	42	14,820	0·5
13.	500—1,000	23	14,218	0·5
14.	1,000 and above	11	25,092	1
	Total ..	1,95,912	30,27,030	100

The above extract discloses that the largest single extent of land was held by the fourth category (15 to 30 acres), which constituted about 30 per cent of the total agricultural area, while the next largest extent pertained to the fifth group (30 to 45 acres), which constituted only 15 per cent of the total agricultural area. Another statement, appended at the end of this chapter showing the distribution of sample households engaged in cultivation by size of land and interest in land cultivated, also reveals that the size of land cultivated by the largest single group of cultivating households in 1961 was 15 to 29.9 acres and this group constituted about 25 per cent of cultivating households, while four sizes of lands ranging from 2.5 acres to 12.4 acres were cultivated by about 50 per cent of the cultivating households. The average *per capita* holding in the district worked out to 15.4 acres, while in the neighbouring district of Bellary (which also is benefited by the Tungabhadra Project) it was 11.5 acres.

Prevention of fragmentation

The size of agricultural holdings is one of the important aspects to be taken into account while considering the productivity of land. According to the report of the Mysore Tenancy Agricultural Land Laws Committee, 1958, there were 48,269 holdings of 0.5 acre in extent in the district, covering an area of 1,46,576 acres which constituted five per cent of the total area as shown above. Such uneconomic holdings naturally increase the

unit cost of production in addition to low yield from the land. This excessive sub-division and fragmentation of holdings took place on account of successions of generation after generation and economic necessities of the cultivators. In order to consolidate these small holdings and prevent further fragmentation of lands, the Mysore Prevention of Fragmentation and Consolidation of Holdings Act, 1966, has been brought into force in the district with effect from May 1, 1969. According to the provisions of this Act, the extent of the unit or fragment of a land-holding under cultivation may vary from half acre to four acres. Any land-holding, having an extent of land less than four acres, is regarded as a fragment and such lands cannot be sold to any one except the contiguous holder either by the option of the party or by the process of law. For purposes of consolidation of holdings, a separate scheme, under the above Act, has been brought into force. There is an Assistant Consolidation Officer, appointed under the provisions of the above Act, who prepares and publishes the list of lands which are considered as fragments. Such fragments of land are taken away from them or added on to the holdings of other parties, after declaring the compensation to be paid to them. The lands, which are thus taken away from them, are allotted to others according to the consolidation scheme and the possession of such lands would be made over to them by issuing certificates of transfer after recovering the compensation amount from such parties but without levying any stamp duty or registration fee. (*See* also Chapter XI).

Land utilisation

Out of the total reporting area of 34,47,096 acres for purposes of land utilisation in the district, the extent of land put to agricultural use, in 1952-53, was 26,63,782 acres, while it was 28,52,610 acres in 1957-58; it had decreased to 26,60,502 acres in 1967-68. The main reason for this kind of fluctuation in the area of land put to agricultural use is the respective seasonal conditions of the period. The subjoined tables indicate the cultivable and uncultivable areas in the district during 1957-58, 1962-63 and 1966-67 :—

1957-58

Cultivable Area

Sl. No.	*Name of taluk*	*Area in sq. miles*	*Area in acres*	*Cultivable*			
				Dry	*Wet*	*Bagayat*	*Total*
1	2	3	4	5	6	7	8
1.	Deodurg ..	595	3,72,622	2,92,262	820	282	2,93,365
2.	Gangavati ..	514	3,26,502	2,41,910	8,062	751	2,50,724
3.	Koppal ..	542	3,40,592	2,62,600	4,918	950	2,68,469

1	2	3	4	5	6	7	8
4.	Kushtagi ..	536	3,38,978	2,72,073	989	584	2,73,647
5.	Lingsugur ..	739	4,81,795	4,01,554	1,446	498	4,03,498
6.	Manvi ..	749	4,42,758	3,71,445	2,587	1,873	3,75,905
7.	Raichur ..	588	3,79,907	2,84,750	10,122	1,277	2,96,151
8.	Sindhanur ..	628	3,94,779	3,46,456	217	268	3,46,942
9.	Yelburga ..	545	3,69,159	3,42,161	1,556	191	3,43,909
	Total ..	5,436	34,47,092	28,15,211	30,717	6,674	28,52,610

Un-cultivable Area

(In Acres)

Sl. No.	Name of taluk	Un-cultivable: Forest	Gairan	Parampoke, River, Road, etc.	Kharij Khata	Total
1	2	3	4	5	6	7
1.	Deodurg ..	26,190	21,883	26,525	4,659	79,257
2.	Gangavati ..	37,470	17,229	10,273	10,805	75,777
3.	Koppal ..	29,823	7,892	27,832	6,574	72,122
4.	Kushtagi ..	11,115	11,657	36,696	5,862	65,331
5.	Lingsugur ..	26,619	15,508	34,958	1,211	78,297
6.	Manvi ..	4,650	16,715	42,647	2,838	66,852
7.	Raichur ..	462	13,782	64,224	5,287	83,755
8.	Sindhanur ..	2,619	11,355	29,595	4,267	47 836
9.	Yelburga ..	..	3,844	19,900	1,505	25,250
	Total ..	1,38,948	1,19,865	2,92,653	43,008	5,94,477

1962-63

(In Acres)

Taluk		Forest	Un-cultivable Area		Cultivable Area					
			Barren	Land put to non-agricultural use	Cultivable waste	Permanent pastures	Land under misc. trees	Fallow land other than current	Net area sown	Current fallows
1		2	3	4	5	6	7	8	9	10
Deodurg	..	9,935	87,800	9,532	1,282	14,437	106	..	2,49,435	..
Gangavati	..	1,067	33,675	12,806	..	18,229	..	5,832	2,28,359	26,534
Koppal		2	33,180	20,923	4,825	7,732	10,363	42,953	2,20,614	..
Kushtagi	..	5,767	13,332	15,064	5,342	11,624	..	1,841	2,68,686	17,322
Lingsugur	..	9,733	27,411	10,152	7,925	17,652	1,279	36,242	3,05,340	66,283
Manvi	..	4,650	1,094	10,805	..	13,864	4,913	2,662	4,02,479	..
Raichur	..	808	18,068	9,108	5,294	13,759	13,772	831	2,59,719	52,796
Sindhanur	..	2,619	3,778	16,197	..	11,309	..	7,941	3,47,477	3,458
Yelburga	..	..	9,025	8,783	2,234	4,280	..	21,299	3,20,553	2,056
Total	..	34,581	2,27,363	1,15,370	26,902	1,12,886	30,433	1,19,601	26,02,662	1,68,449

1966-67

Taluk		Forest	Un-cultivable Area		Cultivable Area					
			Barren	Land put to non-agricultural use	Cultivable waste	Permanent pastures	Land under misc. trees	Fallow land other than current	Total cropped area	Current fallows
1		2	3	4	5	6	7	8	9	10
Deodurg	..	9,935	14,084	20,452	5,130	20,470	106	8,423	2,94,567	..
Gangavati	..	1,067	32,796	11,147	8,900	17,792	..	6,867	2,48,333	..
Koppal	..	362	40,077	12,920	6,040	6,584	10,329	31,897	1,89,229	9,717
Kushtagi	..	6,344	13,524	15,070	5,310	11,634	..	21,228	2,51,399	10,000
Lingsugur	..	9,733	31,800	12,780	1,514	16,161	1,279	40,617	3,28,718	26,967
Manvi	..	5,816	3,616	8,733	5,731	15,052	4,913	1,611	4,04,046	14,505
Raichur	..	898	7,658	1,432	2,206	13,890	14,062	14,173	2,68,972	21,264
Sindhanur	.	2,619	18,198	3,778	3,595	11,355	..	2,788	3,17,595	779
Yelburga	..	438	8,946	1,843	1,596	5,018	..	23,355	2,89,377	5,616
Total	..	37,212	1,69,799	88,155	39,032	1,17,956	30,689	1,50,959	25,92,236	88,848

The foregoing tables disclose, in a general way, the pattern of land utilisation in the district of Raichur. The difference in forest area is due to the protected and unclassified forest area included in 1957-58 figures, but left out in that of the other two years. However, there has been a gradual increase in the forest area since 1962-63, but the extent of increase is not large since it is a *maidan* area of low rainfall.

Land development

Land development, one of the pre-requisites of successful farming, is executed in the district under two phased programmes, *viz.*, land reclamation by mechanical means or manual labour and soil conservation. Lands are reclaimed either by manual labour or mechanical means; while the former is resorted to in places where reclamation by mechanical means is not feasible, the latter is being taken up on an extensive and intensive scale, involving a heavy expenditure, with the help of improved machinery. In cases where lands are reclaimed by manual labour by the cultivating land-holders out of their own resources, the Department of Agriculture is giving them financial aid at the rate of Rs. 50 per acre.

Land reclamation by mechanical means on an extensive scale has been made possible by a fleet of 555 tractors, bulldozers and a fairly large number of agricultural implements specially designed for purposes of levelling lands. The Agricultural Department and the two Land Development Societies at Manvi and Sindhanur, which maintain 31, 19 and 22 tractors, respectively, have taken up the work of land development, on hire basis, in respect of the fields of those farmers who do not possess tractors and other equipments by themselves for such operations. The hire charges vary from Rs. 12 to Rs. 15 per hour in respect of tractors held by the Land Development Societies and other progressive farmers and Rs. 100 to Rs. 160 per acre in the case of Departmental tractors. In places where lands have rugged surfaces of varying slopes, the Departmental tractors are taken to their fields to get their lands levelled.

If the two Land Development Societies, with the assistance of trained technical personnel for organising the work of tractors, are rendering useful service to the cultivators in getting their lands levelled, the Department of Agriculture, with a separate wing at Sindhanur under the control of an Agricultural Engineer and a team of experts and technicians, is educating the cultivators as to how best the lands could be levelled with the help of tractors and bulldozers by organising demonstrations on the fields of the farmers. There are two squads with trained men, located at Manvi and Sindhanur, who survey the lands of the farmers, either at the option of the cultivating land-holders or on the initiative of the Department of Agriculture, in order to find out the percentage of slope of the area and prepare plans for land

development. Survey maps are supplied free of cost to the farmers. The area covered under this survey in 1968-69 was 38,225 acres.

The land development work which is at present concentrated in the irrigated tracts of the five taluks of Sindhanur, Raichur, Manvi, Gangavati and Koppal, is further accelerated by bringing them under the Intensive Agricultural District Programme, a joint venture of the Central and the State Governments. The physical nature of the terrain, the idea of extending the benefits of canal water to as large an area as possible, economising the use of water without much wastage and the sluggishness on the part of the cultivators in making use of the canal water, prompted the Department of Agriculture and the Tungabhadra Board to speed up the work of levelling the lands on an intensive scale in order to make the land fit for irrigation. The year-wise progress of land development under the Left Bank Canal in Raichur district, from 1955-56 to 1968-69, is presented in the statement given below :—

Year		*Land developed by the Departmental tractors (in acres)*	*Land development by the Departmental bulldozers (No. of hours worked)*	*Area levelled by other means (in acres)*
1955–56	..	2,484	1,500	..
1956–57	..	5,802	3,458	..
1957–58	..	3,450	7,000	..
1958–59	..	752	1,643	..
1959–60	..	254	1,530	..
1960–61	..	1,132	1,315	..
1961–62	..	..	..	..
1962–63	..	201	983	1,500
1963–64	..	..	..	3,355
1964–65	..	..	486	10,356
1965–66	..	891	1,697	43,099
1966–67	..	1,260	1,934	21,039
1967–68	..	2,821	6,256	16,191
1968–69	..	2,585	1,918	22,357

The total area developed by the Departmental tractors and by other means is 1,39,073 acres, which is about 19.5 per cent of the area irrigated under all sources in the district and about 30 per cent of the total irrigable area of 5,80,000 acres under the Left Bank Canal. According to the figures furnished by the Deputy Administrator, Tungabhadra Project, a total area of 1,75,801 acres of land has so far been intensively developed in the ayacut area, which is about 31.7 per cent of the total irrigable area under the Left Bank Canal.

One of the most important factors responsible for the slow progress in respect of land development is the limited self-financing potential among the cultivators. Another factor is that those few cultivators, who can afford to take up the work by themselves, are rather reluctant to invest on it. As agriculture in the district has now begun to pay dividends, they are persuaded to invest money on land development. As to the first problem, the State Government are giving *taccavi* loans, on easy terms, to the cultivators. Specialised agencies like the Agricultural Refinance Corporation, Agro-Industries Corporation, National Co-operative Development Corporation and scheduled banks are also advancing loans for purchasing tractors and for getting their lands levelled.

Between 1963-64 and 1965-66, a sum of Rs. 7,67,000 was disbursed as *taccavi* loans in the district for land development. As this help was not adequate, the Agricultural Refinance Corporation stepped in to advance loans. This Corporation has sanctioned a scheme for developing two lakh acres of land in the ayacut area at a cost of Rs. 5,59,000 over a period of seven years commencing from 1966-67. The scale of finance depends upon the percentage of slope of the land and special items of work as detailed below :—

Sl. No.	*Items*	*Rate of loan assistance per acre for* 0–1 *per cent slope*	1–2 *per cent slope*
		Rs.	Rs.
1.	Earth work (rate at Rs. 4 per 100 C.ft.)	120	188
2.	Border bunds		
3.	Smoothening of the surface	28	28
4.	Excavation of supply channels and waste water channels	5	5
5.	Drop and turnout gates	32	42
6.	Green manuring	50	50
	Total	235 or 230	313 or 310

In addition to Rs. 230 for lands with one per cent slope and Rs. 310 for 1—2 per cent slope per acre, a loan of Rs. 45 per acre is given for purposes of eradicating *Haryali* and Rs. 5 per acre for

clearing shrubs. The amount is distributed among the cultivators through primary land development banks located at taluk levels. Cultivators in compact areas of the two Land Development Societies are persuaded to credit the loan amounts into the respective societies in order to get their lands levelled, so that the loan amounts are not utilised for purposes other than levelling of lands.

During the period between the beginning of 1966-67 and the end of May 1969. the Corporation disbursed a sum of Rs. 1,26 96,938 as against the target of Rs. 2,06,84,750 and an area of 29,800 acres and 29 guntas was developed. The details of the physical and financial progress made by the Agricultural Refinance Corporation from the inception of the scheme to the end of May 1969 in this district is presented in the following statement :—

Particulars		*Acres Guntas*
Targets :		
(a) Coverage of area	..	70,500—00
(b) Amount	..	Rs. 2,06,84.750
Sanction :		
(a) Coverage of area	..	72,634—33
(b) Amount	..	Rs. 1,71,84,909
Disbursement :		
(a) Coverage of area	..	65,646—23
(b) Amount	..	Rs. 1,26,96,938
Physical achievement :	..	29,800—29

The total area developed upto the end of May 1969 was only 29,800 acres and 29 guntas, which constituted about 42.2 per cent of the total targetted area of 70,500 acres for the above three years, and about 14.9 per cent of the total area of two lakh acres proposed to be covered by the scheme. However, the progress under the scheme is gradually gaining momentum.

Soil erosion

Soil erosion may be due to abrading and corrosive action of currents of water, winds, etc. In Raichur district, water plays the major role in erosion process which takes away much of the soil fertility. Contour-bunding on catchment basis has been one of the ancient practices followed in the district in checking

soil erosion. The area bunded from 1965-66 to the end of June 1969 was as follows :—

Year		*Total area bunded*	
		Acres	*Guntas*
1965-66	..	585	— 21
1966-67	..	4,655	— 39
1967-68	..	9,422	— 14
1968-69	..	22,556	— 28
1969-70 (upto June)	..	1,973	— 08
Total	..	39,193	— 30

The work of contour-bunding is, mostly, taken up under tank, well and lift irrigation schemes for irrigating dry crops under light irrigation.

Waste lands

In order to bring more and more area under cultivation, the Government took up a survey of waste lands in Raichur district also, as in other contiguous districts of the State, during the Third Five-Year Plan period. Out of the total area of 2,82,550 acres of waste land in the district, an extent of 11,832 acres has been covered under the survey work and 11,141 acres and 21 guntas, which are fit for cultivation, have been classified under four grades for purposes of reclamation. The process of reclamation of these waste lands like clearing the jungle, removing the boulders, levelling and bunding the lands, etc., has involved certain expenditure on the part of the cultivators and the Government is helping them in this regard to an extent of Rs. 50 per acre or 25 per cent of the total cost, whichever is less, as subsidy. So far, an area of 598 acres and 25 guntas of waste land has been brought under cultivation. During the period from 1961-62 to the end of 1965-66, the fresh area brought under cultivation was 1,15,457 acres and during the same period, an area of 8,883 acres of land was distributed among 1,553 landless persons.

It is estimated that an area of 32,805 acres of land has gone out of cultivation due to salinity, alkalinity, acidity and water-logging during the period from 1961-62 to 1965-66. The taluk-wise break-up of the area gone out of cultivation, during the above period, is as follows :—

Sl. No.	Name of Taluk		Area gone out of cultivation due to				Total area
			Salinity	Alkalinity	Acidity	Water-logging	
			(in acres and guntas)				
1.	Deodurg	..	302—00	194—28	..	15—00	591—28
2.	Gangavati	..	2,395—00	2,319—00	..	319—00	5,033—00
3.	Koppal	..	120—00	15—00	..	135—00	270—00
4.	Kushtagi	..	753—20	127—20	..	130—07	1,011—07
5.	Lingsugur	..	51—39	446—21	..	29—12	527—32
6.	Manvi	..	..	1,188—30	..	568—11	1,757—01
7.	Raichur	..	10,016—12	9,105—16	20—11	2,528—15	21,670—14
8.	Sindhanur	..	329—00	624—20	..	197—00	1,150—20
9.	Yelburga	..	137—24	92—21	..	..	236—05
	Total	..	14,137—14	14,506—17	20—11	3,816—17	32,805—10

It can be seen from the above table that the total area gone out of cultivation owing to salinity and alkalinity and water-logging in the district is 32,805-19 acres, constituting about 11.1 per cent of the total area of waste land, while Raichur taluk, the worst affected taluk in the district, accounted for 7.6 per cent and the badly affected taluks of Gangavati, Manvi and Sindhanur accounted for about three per cent to the total area of waste land.

Reclamation Scheme

Reclamation of saline land has been taken up by having a net-work of deep cuts to the slopes of the lands and by leaches. The Department of Agriculture has advised the farmers to grow salt-tolerant crops like paddy, sugarcane, castor, etc., which help a gradual reduction of salt concentration in the affected lands. On some lands, where alkaline reaction is large, gypsum is added to the soil followed by flushing with good quantity of water. Use of acid forming chemicals such as sulphur is also practised for neutralising the effects of salinity. The area reclaimed from 1966-67 to 1968-69 was only 119.17 acres which was rather negligible when compared to the total area gone out of cultivation on this account. This problem is seriously engaging the attention of the Department of Agriculture. The scheme for reclamation of acid and alkaline soils has been in operation in the district of Raichur since May 1964. The main purpose of this scheme is to reclaim such soils by using chemicals, opening good drainages, breaking the hard clods of black cotton soils and creating easy way for percolation of water and lastly by recommending salt-resistant crops to be grown on such affected lands. In 1968-69, an area of 545 acres was reclaimed as against the target of 200 acres. Reclamation of lands was also taken up by individual farmers out of their own resources. In such cases, a subsidy is given to them as an incentive measure. In 1968-69, an amount

of about Rs. 14,700 was distributed as subsidy for reclaiming 401 acres of land.

Agricultural meteorology

The success or failure of farming is dependent, to a large extent, on the prevailing weather conditions and their influence begins with the preparatory tillage and continues to prevail throughout the crop-growing period. A proper knowledge of the relation between crops and weather-risks the farmers face at successive stages of plant growth, is necessary for profitable farming. The climate of Raichur may be described as essentially a tropical monsoon-type and is characterised by dryness for the major part of the year. The district as a whole lies in low rainfall area, the average rainfall being only 23.68" and September being the month of peak rainfall. The intensity of the mean annual rainfall is greater in the east and north-east than in the west. The district receives 71 per cent of its annual rainfall during the south-west monsoon period. Yelburga and Kushtagi taluks get better rainfall when compared with other taluks. The following statement gives the average monthly rainfall in the district in millimetres :—

Month	*Rainfall*
January	2.9
February	3.5
March	5.4
April	16.6
May	35.3
June	82.2
July	89.6
August	106.3
September	138.2
October	71.4
November	25.1
December	2.8

(For more details in respect of rainfall, see also Chapter I).

Agricultural seasons

The following four seasons recognised by climatologists are also applicable to this district :—

(1) Cold-weather period (January to February).

(2) Hot-weather period (March to May).

(3) South-west monsoon period (June to September).

(4) North-east monsoon period (October to December).

The cold season commences by the beginning of December and lasts till the middle of February, December being the coldest month. It is a suitable period for sowing summer crops.

Farmers are usually busy during this period also in marketing their produce, harvested in the previous months. The hot season begins by about the middle of February and continues till the onset of the south-west monsoon, May being the hottest month. The farmers start sowing operations for Khariff crops during this period. The period between June and September is recognised as the south-west monsoon period, though there may be deviations on either side, owing to changes in conditions of pressures and wind directions. During this period, the district gets wide-spread rainfall resulting in the main peak formations in September and a subsidiary one in July. For agricultural operations, this period is very important except in places where double cropping is practised supplemented by additional water. The work of preparing the land for Rabi crops is started just prior to the commencement of rains. There is practically no rain during the north-east monsoon season; but it helps the growth of Rabi crops like white jowar, cotton, etc.

Sufficient rainfall for the normal crop is generally expected only once in three to four years. Most of the precipitation is during the fag end of the rainy season.

Based on the above seasonal conditions, the district has three distinct seasons which are also based on the crops grown, *viz.*,

(1) Khariff season, which starts from June and ends in the month of August;

(2) Cotton season, which starts by about the middle of August and lasts up to the end of March;

(3) Rabi season, which commences from the middle of October and ends in November: and

(4) Summer season, which starts from about December or January and goes up to the end of April.

The lands for Khariff sowing will generally be ready by the end of May or the beginning of June and those for Rabi sowing by the end of July or the beginning of August. Agricultural operations go on till about August-September in the case of Khariff crops and November-December in the case of Rabi crops.

Soil types

The predominant soils of Raichur distrcit are black cotton soils and red soils, popularly known as 'Regadas' and 'Chalkas' or 'Masabs' respectively. A large part of the district is covered with black cotton soils. 'Chalkas' or 'Masabs' are exclusively utilised for Khariff crops since they are easily workable even after heavy rains in view of the friable nature of the soil. The deep 'Chalkas' appearing from six to eight inches in thickness are suited to all kinds of irrigated crops, including sugarcane. The shallow 'Chalkas' are found from six to 18 inches in thickness and

are also suitable for wet cultivation. But shallow 'Chalkas' are not as productive as deep 'Chalkas'. If deep 'Chalkas' are found to a lesser extent, shallow 'Chalkas' are found in quite a large area. Gravelly to stony 'Chalkas', varying from three to four inches, are not used for any type of cultivation. They are not suitable even for raising pastures without proper manuring and tillage, but are mostly planted with oilseeds.

Black cotton soils are commonly used for raising Rabi crops, *i.e.*, crops planted in cold season about the fag end of the rainy season, and are rarely used for Khariff crops on account of their plastic and sticky nature when wet. Grey to grey loams to clay loams are found extensively in Sindhanur and Manvi taluks and only to a limited extent in other taluks. Grey to dark grey black cotton soils are found distributed over all the taluks. Chacolate brown to chacolate red soils, mostly appearing as loams up to two feet or more, are well-drained and suitable for Khariff crops as well.

Chemical properties

The red soils are generally poor in plant nutrients as they are ordinarily developed under severe leaching conditions. On the contrary, black cotton soils possess high nutrient reserves of basic elements, especially of calcium, magnesium, soda, etc., as they are formed under accumulative conditions. They contain large quantities of water soluble salts and they are very calcareous, with their phosphorous values at 8.5 and above in the surface layers. The red soils in the district, though generally calcareous, are not free from lime, especially in the lower depths. Their phosphorous values are between 7.0 and 7.5 in the surface layers.

The 'Chalka' lands are generally preferred for wet cultivation and the dry 'Chalka' or 'Masab' lands are also valued at par with black soils. Black cotton soils, especially deeper ones, are used for Rabi crops. Once manured, black cotton soils would respond for four to five years, while 'Chalka' lands require frequent manuring. Red soils, on account of their lighter texture, are open and porous and allow excess water to pass through quickly and drain away, carrying insoluble plant nutrients. In addition to it, their clayey quality is low for moisture retention. Hence, the red soils need frequent irrigation or rains for successful plant growth. However, the moisture-holding capacity of the red soils may be improved by constant application of bulky organic manures. The red soils require lesser quantity of water for effective crop growth than black cotton soils which need heavy irrigation. Root and tuber crops like potato and sweet potato, vegetables like radish, and crops like ginger, turmeric, etc., need lighter textured red soils, whereas heavy textured black cotton soils are suitable for other kinds of crops. In order to maintain optimum physical

properties of the soils for a good crop growth, red soils are ordinarily preferred to black soils, provided the plant food and moisture status of the soils are properly maintained.

In the light of the difficulties faced by the farmers and with a view to developing cropping patterns under light irrigation for black cotton soils of the Tungabhadra Project area in Raichur district, a study team was constituted by the Director of Research, University of Agricultural Sciences, Bangalore, in 1967. This team, considering the recommendations of an expert committee on the same subject, which submitted its report in 1955, and other aspects, has classified the soils into the following grades for purposes of localisation of crops :—

Grade I.—'Chalka' soils or 'Masab' red loams, silt loams, etc. These soils are well suited for heavy irrigation. Red loams in deep phases have been recommended for perennial gardens.

Grade II.—Black soils varying in depth from 18 inches to 36 inches underlaid by murram. These soils are suitable for crops like sugarcane and light irrigated Rabi crops because of their high moisture retentive power.

Grade III.—Shallow black cotton soils of six inches to 18 inches in depth. This kind of soil is generally excluded from irrigation, but sometimes recommended only for protective irrigation. Brown loam soil is recommended for garden crops, both seasonal and perennial, because of its loamy, friable texture and free drainage.

Grade IV.—Eroded, undulated, skeletal and very shallow soils of less than six inches in depth. These soils are excluded from irrigation, but recommended for afforestation.

Research is being carried on in the field of soil analysis. Several problems relating to soil management are being tackled by the Regional Research Station, Raichur, where investigations on entomology and soil science are being done. There is a soil-testing laboratory at Dhadesugur where soil samples are being analysed, at the rate of 75 samples per day and about 1,500 samples per year, for the benefit of the cultivators. The soil analysis reports and recommendations are passed on to the agriculturists and follow-up programme of such recommendations is also envisaged. An Agricultural Engineering Institute has been also started at Raichur.

Forests

Forests are, undoubtedly, one of the main basic factors which can contribute towards the wealth of a district. But Raichur district, being wholly in the *maidan* region, is poor in point of forests. Forests are mainly confined to the taluks of Manvi,

Lingsugur and Deodurg, with only scattered and isolated areas in the Kushtagi and Raichur taluks. In Sindhanur and Yelburga taluks, there are no forests at all. The total area under forests in1968-69 was 1,63,103 acres and 26 guntas as against 1,64,409 acres and 91 guntas in 1961-62, which constituted about 4.24 per cent of the geographical area of the district.

The break-up of the forest area in the district, in 1967-68, was as follows :—

Forest area declared under Section 19 of Mysore Forest Act.	46,746.41	acres
Forest area declared under Section 4 of Mysore Forest Act.	46,049.21	,,
Protected forests ..	453.00	,,
Unclassified forests ..	69,855.55	,,
Total forest area ..	1,63,104.17	,,

An area of 12,500 acres has been released from the Revenue Department to the Forest Department, in 1968-69. Similarly, the lands fit for agricultural purposes (*i.e.*, 1,306 acres and 29 guntas) have ben handed over to the Agricultural Department during the same year.

The forests in the district consist mostly of deciduous trees and scrubs. About 20,000 acres of forest area are under mixed deciduous trees. Thus, the forest potential is poor and the exploitation of this potential is almost limited to the extraction of firewood from dry mixed deciduous forests under a system called " coppice system ".

Plantations

There are no forest areas under private management in the district. There were, in all, 23 plantations in the district upto the end of 1964-65, of which the Hirebergi plantation, Hanamsagar plantation, Munirabad (Tungabhadra Project) plantation and Guntagale plantation were having an area of more than 1,000 acres each. Afforestation work, all along the slopes on either side of the Left Bank Canal bunds, for a distance of 54 miles, had been taken up. A pit plantation, of an area of 195 acres, is located at Hanamsagar and Yergera. During 1965-66, five new plantations were started and in 1968-69, nine more were added, mostly in the ayacut area.

The main forest produce obtained in the forest area of the district is firewood, minor forest produce and miscellaneous trees. The minor forest produce consists of *tarwad* bark, beedi leaves, rousa grass, sharifa or *sitaphal*, honey, soapnut and tamarind.

The revenue realised from the sale of the forest produce, in 1957-58, was only Rs. 63,968. As a result of the increasing attention being paid for conserving and improving the vegetation, the revenue has been raised to Rs. 16,048.05 from firewood, Rs. 14,325.54 from miscellaneous items and Rs. 51,604.85 from minor forest produce, thus making a total of Rs. 81,978.44 in the year 1968-69.

There has not been any large-scale forest-based industry in the district. The light varieties of wood like the *palaku* and the *peddaman* have been made use of by the toy-making industry at Kinhal in Koppal taluk.

A fuel plantation scheme is being implemented in this district for purposes of raising fuel-wood species for the supply of fuel. About 500 acres of plantation is being raised under this scheme.

Soil conservation

The main purpose of the soil conservation scheme is to check erosion in general and to conserve moisture. Bare and eroded slopes are planted with local and exotic species of trees to check further soil erosion. Gully plugging, bunding and such other works are also taken up. Annually, about one hundred acres are covered under this scheme.

Under a minor forest produce scheme, a hundred-acre plantation is raised annually. Agave plant, a valuable minor forest produce, is planted all along the borders of the plantation.

Foreshore afforestation in the Tungabhadra Project water-spread area has been taken up as a measure to prevent further siltation in the reservoir. The progress of afforestation work in the ayacut area was as follows :—

Year	*No. of trenches dug*	*Plantations maintained (in acres)*	*Foreshore plantation*	*No. of seedlings supplied*
1955-56	70	..	..	..
1956-57	150	..	..	..
1957-58	300	..	..	..
1958-59	524	714	..	..
1959-60	600	968	50	..
1960-61	600	537	50	..
1961-62	300	2,102	70	..
1962-63	200	200	140	3,50,000
1963-64	..	..	..	..
1964-65	..	1,790	..	16,000
1965-66	..	..	..	1,70,003
1966-67	..	8	..	..
1967-68	8	8	..	..
1968-69	8	8	..	..

There are five units of nurseries, two at Odderhatti and three at Munirabad, where seedlings are raised and supplid to the public.

Famines and scarcity conditions

The thirsty black cotton soils of the Raichur doab region gaped wide at the baking sun of May, the weary farmer cast his vain look on the idle plough, the dumb animals hung their heads low, as the famine loomed large over the entire region, which might have been caused by the mighty armies of lusty kings shedding the blood of the innocent and devastating the land or the rain-bearing winds receding to the remote corners leaving the standing crops at the grip of the burning sun or only the light showers drenching the outer layer of the soil to leave the seeds or seedlings only to be dried up by the hot sun. The damage caused to the standing crops by hails, locusts, rats, insect pests, diseases, etc., was never felt so seriously as that caused by famine conditions.

The available records, dating from 14th century, or even earlier, depict vividly the horrors of famine which swept over the district at frequent intervals, leaving a large area barren and taking a heavy toll of human and cattle population. It would do well to quote a few lines from the Badshahnama, written in about 1630 by Abdul Hamid: he says: * "Life was offered for a leaf, but none would buy .... For a long time, dog's flesh was sold for goat's flesh and the pounded bones of the dead were mixed with flour and sold. Men deserted their wives and children. Women sold themselves as slaves. Mothers sold their children, and some families took poison, others threw themselves into the rivers. Destitution at last reached such a pitch that men began to devour each other and the flesh of a son was preferred to his love. In the streets and still more on the road journeys, men ran great danger of being murdered and eaten".

In the 1472 famine, according to Ferishta: "The towns became almost depopulated, many of the inhabitants died of famine and numbers emigrated for food outside the dominions. In Talingana, Marathwara and throughout the Bahmani dominions, no grain was sown for two years and in the 3rd, when the Almighty showered His mercy upon the earth, scarcely any farmer had remained in the country to cultivate the land." In 1659, Raichur and other parts of the Hyderabad State suffered from a severe famine. The "Dogi Bara" or the skull-famine, known for the appalling number of human beings that perished in all the taluks of the district in 1792-93, left the lands barren and desolate. A large number of people emigrated to the neighbouring districts. Jowar was sold at 2½ seers a rupee. In 1802-03, when the locally called "Ragi Bara" occurred, people,

* Statistical Year Book for 1941-42 to 1944-45 (p. 1049), Government of Hyderabad, 1949.

being unable to bear the brunt of famine, migrated to the Bombay presidency areas. Jowar was sold at three seers a rupee. Another famine, more severe and intense than that of the previous years, broke out in 1804 owing to drought and the Holkar's raid. Thousands of people perished for want of drinking water. Marauders increased the sufferings of the famine-affected people by plundering their property and killing those who opposed them. In 1819, again famine broke out. Cholera added its share to it and multiplied the sufferings. Carrots were largely grown under well irrigation for food, and the famine is still remembered as the "Gajara Kal" or carrot famine. Charity houses were opened and cooked food was distributed among the poor; one seer of jowar per head per day was distributed among the better classes. Again, in 1833, the farmers were thoroughly disappointed by the monsoon winds and the people had to face also the scourge of cholera. Being unable to bear the brunt of famine, thousands of persons emigrated. Many parents sold their children for food and many people ate leaves like animals to quench their burning hunger. Two outstanding measures then introduced by the then Government were the opening of poor houses and the fixation of prices for food-grains by the local authorities. After a lapse of thirteen years, another famine removed a great number of cattle and almost wiped off the fowls. Then again, there was a wide-spread famine of great intensity throughout Southern India which lasted for about two years from October 1876 to July 1878, during which period Raichur got less than 2.41 inches of rainfall. Then gold was sold at the rate of Rs. six to seven per tola. During the same period, a Central Relief Committee was appointed and Special Commissioners were nominated.

The famine in 1896-98, caused by irregular rainfall, was not so severe and it affected Gangavati, Kushtagi, Lingsugur, Sindhanur and Raichur taluks only, leaving the other five taluks almost unaffected. The sudden rise in prices of food-grains left the farmers helpless as their limited resource was drained completely. The Government opened cheap grainshops for a limited period of two to five months, started poor houses and distributed grains to the poor and disabled and clothings to *purdah* women. In the drought of 1905 an army of swarms of locusts destroyed the standing crops and gardens in Deodurg, Manvi, Sindhanur and Lingsugur taluks of the district.

In 1941, rats affected the crops in Raichur, Lingsugur, Manvi and Sindhanur taluks of the district to such an extent that the then Government was forced to take up a special preventive measure at a cost of Rs. 10,000. The Khariff harvest of 1943 failed in 640 out of 832 villages in Lingsugur, Gangavati, Manvi, Sindhanur and Kushtagi taluks and the condition of Rabi crop was even worse. The Government sanctioned a remission of all

arrears in excess of one year's demand and relief works like deepening and silt clearing of wells, distribution of seeds, import of foodgrains from other districts, gratuitous relief and milk rotation to children, etc., were taken up. On account of the failures of Khariff and Rabi crops in Kushtagi, Gangavati, Sindhanur and Manvi taluks in 1945, the then Government declared scarcity conditions in all these taluks and relief was given to the suffering people. The years 1946, 1947 and 1950 were fairly normal, but the year 1951 was again a period of distress. The failure of crops was repeated in 1956 and 1957. Scarcity conditions prevailed in one taluk or the other in the district between 1957-58 and 1968-69. Its effect was felt all over the district in 1957-58. The taluks of Manvi, Lingsugur, Sindhanur and Gangavati were hit hard continuously for a period of three years from 1958-59 to 1961-62. Untimely rainfall was the main reason for such scarcity conditions. The year 1962-63 was, however, free from distress. In 1964-65, Yelburga taluk suffered much from the untimely rainfall. From 1965 to 1968, the Kushtagi, Koppal, Gangavati and Yelburga taluks did not receive sufficient rains for carrying on agricultural operations. The State Government undertook several famine relief measures to lessen the hardships of the people. In 1968-69, 748 villages with a population of 5,99,450 persons were affected by the famine. The Government, therefore, suspended land revenue to a tune of Rs. 4,91,766.78 in parts of Manvi, Kushtagi, Koppal and Gangavati taluks and remission to a tune of Rs. 5,39,227.37 was proposed in parts of the taluks of Yelburga, Gangavati, Sindhanur, Kushtagi and Raichur. In addition, a sum of Rs. 31,93,166.24 was spent towards relief works like construction of roads, digging of irrigation wells, repairs to the existing wells, deepening of drinking water wells, soil conservation works, etc. Milo worth Rs. 2,29 995 and fodder valued at about Rs. 5,910 were also distributed free among the people of the affected areas.

Floods

The placid waters of the Tunghabhadra flowed down her course, bordering the southern parts of the district regardless of the hue and cry in the district created as a result of distress conditions; but in 1924 she came in floods without, however, causing much damage to life or property. In 1934, the crops were badly damaged in Sindhanur taluk owing to hail storm. After ten years, Kushtagi taluk felt the pinch of scarcity of jowar due to heavy rains and this famine was popularly called "Sajji Bara" and during this period people used bajra in place of jowar. Heavy rains as a result of cyclone and plague in a deadly epidemic form, played havoc in 1949. While Sindhanur suffered much from the outbreak of plague and Lingsugur from cyclone, the Kushtagi, Manvi and Yelburga taluks were hit hard by heavy rains. In Kushtagi taluk, the rains lasted for 20 days and 70 per cent of ordinary houses collapsed. In Manvi and Yelburga taluks, the heavy rains brought down a number of

houses. This famine is still remembered as "Swati Bara". In 1950-51, a number of houses collapsed in many villages of Sindhanur taluk and the Government helped the sufferers by giving cyclone *taccavi* loans. Heavy rains followed by hailstorms destroyed the Rabi crops in Kallur and nearby villages of Manvi taluk in 1954, injuring a number of agriculturists who were picking cotton in their fields. The land revenue to a tune of Rs. 21,250 was suspended as a relief measure. In 1960-61, the flooded Tungabhadra flowed wild destroying 44 houses in Manvi taluk and 369 acres and 12 guntas of standing crops touching the borders of the Gangavati taluk. The Government sanctioned a flat rate of Rs. 40 to be paid to each family whose house was damaged by the floods, followed by distribution of grains and clothes worth about Rs. 720 supplied by the Red Cross Society. Liberal financial assistance, amounting to Rs. 5,000, was given to persons whose crops were affected by floods. In order to give permanent relief to the worst affected villages of Chikalparvi and Yadwal in Manvi taluk, the inhabitants were rehabilitated in safer places. By the end of 1960-61, a sum of Rs. 1,00,000 was spent for purposes of rehabilitating these people.

Considering the irrigation potential so far created under different sources, which works out to nearly 7,11,379 acres and the proposed Narayanapur Right Bank Canal under the Upper Krishna Project, which would irrigate another five lakh acres, it can be said that a new chapter has been opened in the agricultural history of the district which has been, thereby, put well on the way to prosperity.

Irrigation

The meagre and mostly unreliable rainfall of the district, resulting in frequent visitations of droughts and famines, had obviously set a serious limit to the progress of agriculture, and this was continuously hindering the economic well-being of the district. The age-old practice of an artificial application of water to soil for the purpose of supplying moisture essential to the plant growth had been realised, to some extent, by the rulers in the by-gone days also and the famous Vijayanagara channels were of considerable benefit to the agriculturists of the region. The importance of conservation, control and utilisation of the waters flowing down the perennial rivers, the Tungabhadra and the Krishna, and several other small streams of the district, is indeed great and the inhabitants of Raichur district owe a deep debt of gratitude to the originators of the Tungabhadra Project.

Exclusive of the area that was brought under irrigation by the Tungabhadra Left Bank Canal and the Rajolibanda Diversion Scheme, the total area under irrigation in Raichur district in 1957-58 was only about 30,000 acres, of which about 9,700 acres

were irrigated by Government canals, about 10,600 acres by tanks, about 4,000 acres by wells and the rest by other sources.

The total irrigated area, including the area that was brought under irrigation by the Tungabhadra Left Bank Canal and Rajolibanda Diversion Scheme, increased from 1,40,116 acres in 1962-63 to 4,89,421 acres in 1966-67. The taluk-wise distribution of the area irrigated under different sources for 1962-63 and 1966-67 is presented below:—

1962-63

(In Acres)

Sl. No.	Taluk		Canals	Tanks	Wells	Other sources	Total
1.	Deodurg	..	..	690	..	..	690
2.	Gangavati	..	42,691	51	24	126	42,892
3.	Koppal	..	4,637	141	285	150	5,232
4.	Kushtagi	..	..	..	..	..	..
5.	Lingsugur	..	..	..	55	4	59
6.	Manvi	..	815	80	..	..	895
7.	Raichur	..	4,610	12,797	2,246	977	20,630
8.	Sindhanur	..	67,590	70	974	447	69,081
9.	Yelburga	..	..	71	335	231	637
	Total	..	1,20,363	13,899	3,919	1,935	1,40,116

1966-67

(In Acres)

Sl. No.	Taluk		Canals	Tanks	Wells	Other sources	Total
1.	Deodurg	..	..	959	660	..	1,619
2.	Gangavati	..	77,083	271	78	630	78,062
3.	Koppal	..	4,702	148	285	150	5,285
4.	Kushtagi	..	..	158	1,354	..	1,512
5.	Lingsugur	..	..	55	4	..	59
6.	Manvi	..	2,27,536	80	858	..	2,28,474
7.	Raichur	..	4,610	13,872	2,246	..	20,728
8.	Sindhanur	..	1,51,620	70	974	437	1,53,101
9.	Yelburga	..	..	114	350	117	581
	Total	..	4,65,551	15,727	6,809	1,334	4,89,421

Among the taluks having the benefits of canal irrigation, Manvi taluk has the first place and Sindhanur takes the second place. As at present, only five taluks of the district are benefited by canal irrigation, *viz.*, Manvi, Sindhanur, Gangavati, Koppal and Raichur. As per the figures furnished by the Deputy Director of Agriculture, Raichur, the total cropped area in the district in 1967-68 was 26,16,773 acres, of which 19,65,394 acres

were under rainfed conditions and 5,80,000 acres under the Tunga-bhadra Left Bank Canal and 1,31,379 acres under various other sources of irrigation. Obviously, therefore, the bulk of agricultural production in the district consisting of cereals, pulses, cotton, groundnut and other oilseeds depended on the vagaries of the monsoon. With a very low average of rainfall, which is itself rather erratic in nature, there was always the threat of famine looming before the agriculturists.

Irrigation wells

The total number of irrigation wells in the district is placed at about 6,000 to 7,000 and the area covered by them in 1968-69 was about 1,07,500 acres as against the target of two lakh acres. The agency which executes the work of construction of irrigation wells is, ordinarily, the Taluk Development Boards of the respective taluks. They take up the work of construction of wells under community development programme and scarcity relief works. The total number of works taken up by the different community development blocks in the district for sinking wells was 1,871 in 1967-68, of which 937 wells were completed and the rest were in progress. A large number of such wells was being sunk in Yelburga taluk. The following two tables present the number of wells sunk under the community development programme and under the liberalised rules, respectively, since the inception of the schemes to the end of March 1969 :—

Under Community Development Programme

Sl. No.	Taluk/Block	No. of wells sanctioned since inception	No. of wells completed	No. of wells abandoned or cancelled	No. of wells in progress
1	2	3	4	5	6
1.	Deodurg ..	198	195	..	..
2.	Kushtagi ..	251	161	60	3
3.	Koppal ..	277	218	..	..
4.	Gangavati ..	127	41	40	46
5.	Kavital ..	95	63	3	1
6.	Bevoor ..	117	62	18	37
7.	Lingsugur ..	128	67	59	..
		71	39	29	3
8.	Manvi ..	11	..	..	..
9.	Raichur ..	63	12	2	7
10.	Sindhanur ..	221	59	..	..
11.	Yelburga ..	312	120	45	147
	Total ..	1,871	1,037	256	244

Under Liberalised Rules

Sl. No.	Year		No. of wells at the beginning of the year	No. of wells sanctioned during the year	Total No. of wells taken up	Total No. of wells completed
1	2		3	4	5	6
1.	1960-61	..	..	1,422	1,422	294
2.	1961-62	..	1,114	340	1,454	360
3.	1962-63	..	1,074	510	1,584	201
4.	1963-64	..	1,363	194	1,557	165
5.	1964-65	..	1,362	273	1,635	140
6.	1965-66	..	1,415	..	1,415	314
7.	1966-67	..	1,062	..	1,062	88
8.	1967-68	..	974	..	974	39
9.	1968-69	..	574	..	574	21

The total number of wells constructed both under the Community Development Programme and the Liberalised Rules up-to the end of March 1969, was 6,600.

As the level of water in wells is far below the level of the fields, some devices of lifting water to the fields are necessary. Lifting of water is purely a mechanical job and the popular devices of lifting water from the wells to the fields for raising crops in the district are 'motes', persian wheels and water lifting engines. Mote is one of the most commoly practised methods of lifting water from the wells to the fields. It requires two pairs of bullocks to lift the water to the surface of the land by making each pair work alternatively. A pair is made to pull the burden down the mote till the bucket comes up to the top, during which time the other pair, which is not burdened with the yoke, returns to the spot in a circuitous way to bear the burden. The mote, made of leather, is of two sizes, one measuring about 10 feet from mouth to mouth and the other five to six feet. Another popular device followed in the district for lifting water is through the persian wheel. It consists of a large open soaked drum, two parallel loops of rope or chain joined by spacing bars and fifty metal containers. The chains with these containers are made to pass over a cog and as these metal containers pass over the top they spill their contents into the trough from where the water is carried on to the fields.

In 1966-67, there were 115 oil engines and 525 electric pumpsets in the district for irrigation purposes. For a long time, diesel water lifting pumpsets were in use. Electric pumpsets are now becoming more and more popular and are gradually replacing the diesel oil engines.

Tanks

Most of the tanks in the district are fed by rains received between the months of June and September. They are rarely full with water except in the case of a few minor tanks of importance. There are 900 serviceable tanks with an atchkat of 22,409 acres in the district. The following table shows the distribution of tanks in the district and the atchkat area covered by them in each taluk as in 1968-69 :—

Sl. No.	Taluk	*Tanks having an atchkat of less than 50 acres*		*Tanks having an atchkat of more than 50 acres*		*Total No. of tanks and their atchkat*	
		No	Acres	No.	Acres	No.	Acres
1.	Deodurg ..	13	2,270	58	600	71	2,870
2.	Gangavati .	6	150	10	5.142	16	5,292
3.	Kushtagi ..	..	.	4	921	4	921
4.	Koppal ..	7	211	4	718	11	929
5.	Lingsugur ..	3	287	6	137	9	424
6.	Manvi .	7	1,742	47	600	54	2,342
7.	Raichur ..	39	3,421	690	5,900	729	9,321
8.	Sindhanur ..	..	..	1	118	1	118
9.	Yelburga ..	3	78	2	114	5	192
	Total ..	78	8,159	822	14,250	900	22,409

Tank irrigation is mostly concentrated in Raichur, Manvi and Deodurg taluks. Raichur taluk alone has the largest number of tanks and the ayacut area it commands is more than 41.6 per cent of the total area under tank irrigation. The Public Works Department has completed nearly 220 new tank works costing more than 20,000 rupees each, at a total expenditure of Rs. 1,00,95,453 between 1956 and 1968.

Katapur tank

Katapur tank, near Katapur village in Gangavati taluk, is being constructed at an estimated cost of Rs. 23,96,000. It will, after completion, become one of the largest tanks in the district with a catchment area of 47.48 square miles. The construction work of the tank was taken up in the year 1964. The tank is so designed as to have a water discharge capacity of about 12,500 cusecs. It will irrigate an area of 1,600 acres.

Lakshmidevikere

The Lakshmidevikere at Kanakgiri, in Gangavati taluk, is a new tank constructed at a cost of Rs. 9,16,253. The construction of the tank was taken up as early as 1958 and completed in 1963. The tank is designed to have a water discharge capacity of about 9,090 cusecs. It has a catchment area of 66.36 square miles, irrigating an area of 1,500 acres.

Chittavadgi tank

The Chittavadgi tank, located near Kadur village in Kushtagi taluk, was completed at an estimated cost of Rs. 36 lakhs. It

is designed to hold about 201 million cubic feet of water and irrigate an area of 2,200 acres in Raichur district. It will also benefit a few acres in Hungund taluk of Bijapur district.

Lift Irrigation Schemes

Lift Irrigation Schemes have also been under way in the district. In order to make the schemes popular, extension of power lines from main production centres has been taken up, wherever possible. The waters of the rivers in the district can be tapped for agricultural purposes through lift irrigation schemes also, and there are already eight such schemes in operation. The biggest among them is located at Hunkunti in Koppal taluk. This work was taken up at an estimated cost of Rs. 1,54,000, but it was subsequently revised to Rs. 4.20 lakhs. The water source for this scheme is the Tungabhadra reservoir. It is so designed as to lift water to a height of 75 feet and irrigate 1,200 acres, with a pumping capacity of 28.00 cusecs of water. The work was still in progress. Some other important lift irrigation schemes are located—one near Katarki village in Koppal taluk, irrigating about 1,000 acres and another at Amaravathi village in Deodurg taulk irrigating about 1,030 acres. The following table gives details of the important lift irrigation schemes in the district and the area benefited by each, as in 1968-69 :—

Sl No	*Location*	*Estimated cost in lakhs of rupees*	*Water source*	*Ayacut area in acres*
1	2	3	4	5
1.	Tigari village, Koppal taluk ..	3.12	Tungabhadra Reservoir.	550
2.	Katarki village, Koppal taluk ..	4.00	do ..	1,000
3.	Mattur village, Koppal taluk ..	1.46	do ..	700
4	Hunkunti village, Koppal taluk	4.20	do ..	1,200
5.	Raichur ..	0.70	Rajolibanda Diversion Scheme.	334
6.	Raichur ..	0.77	do ..	750
7.	Chinchodahalli ..	4.90	do ..	250
8.	Amarapur village, Deodurg taluk	0.87	do ..	1,032
	Total .	20.02		5,816

Out of this total ayacut area of 5,816 acres under the lift irrigation schemes, the actual area that will ultimately be benefited will be only 4,195 acres and of this, water is made available so far to an area of only 1,150 acres. Though the lift irrigation schemes on the Rajolibanda Diversion Scheme are almost completed, the ayacut area coming under them is yet to be developed.

There are no special schemes for localisation of crops under tank and well irrigation, but a considerable area under tank irrigation is covered with paddy crops. Farmers are induced to take up the cultivation of hybrid and short duration crops like hybrid jowar, bajra and hybrid maize, as they are mostly light irrigated crops.

The actual percentage of the area irrigated under minor irrigation works out roughly to 2.68. The total probable water potential of the district is of the order of 32,000 million cubic feet, calculated on an empirical basis. To utilise this water potential. 88 new feasible schemes have been proposed. Out of them, 35 minor irrigation works are already in progress which will, after completion, irrigate an area of 11,693 acres. When all the 88 schemes are completed, the district can, at the most, make use of 43 per cent of the available water yield.

Canal Irrigation

Canal irrigation was not widely known to the people of the district in the past till the days of the rulers of Vijayanagara empire, who took up the construction of a few canals which are now known as "Pre-Mughal Canals" or "Vijayanagara Canals" in order to counteract the effects of droughts and famines and to protect the people against the vagaries of the monsoon. However, it is only after taking up the two major projects, namely, the Tungabhadra Project and the Rajolibanda Diversion Scheme, that canal irrigation in the district has attained the present importance as a major source of irrigation.

There are six old Vijayanagara canals taking off on the left side of the Tungabhadra river in Raichur district, namely Hulgi Channel, Shivapur Channel, Anegundi Channel, Upper Gangavati Channel, Lower Gangavati Channel and Buchal Channel. The total area actually irrigated by these channels, including Koregal Channel, at the time of the re-organisation of States, was 10,701 acres. In order to provide regular flow of water into these channels, embankments just like masonry walls were thrown across the river Tungabhadra at certain places. The main purpose of constructing such embankments was to divert the river water into the channels that take off from one end of these anicuts for providing irrigation under their command, by raising the level of the water in the river by a few feet without actually involving considerable water-spread. These anicuts were built probably during the time of Krishnadevaraya and his successors between 1509 A.D. and 1560 A.D. They have been constructed with the locally available boulders placed one over the other and cleverly joined together and made into a sort of masonry wall across the river. These anicuts follow a zig-zag alignment and are joined to the several small islands that are found in the bed of the river. The boulders are sometimes cut into rectangular shapes and joined together with iron hooks so as to keep them

in position. The other details of three such important anicuts in the district are given below:—

Sl. No.	Details	Hulgi Channel	Shivapur Channel	Anegundi Channel
1	2	3	4	5
1.	Length in miles ..	7	9	12
2.	Discharge in cusecs ..	25	29.5	83
3.	No. of distributaries and field channels.	53	50	96
4.	Total area irrigated ..	655	997	2,220
5.	Width of the canal (in feet) ..	8	10	15
6.	Depth (in feet) ..	2.5	2.25	3.50
7.	Amount of remodelling estimate (in lakhs of rupees).	6.17	3.60	12.95

The total area irrigated under these three Vijayanagara channels is 3,872 acres. Sugarcane and paddy are the important crops generally grown under these channels. The farmers are being induced to grow also short duration paddy crops like IR-8, ADT-27, Hamsa, Padma, Jaya and Selection-28, etc.

Rajolibanda Diversion Scheme

There are two major irrigation projects in the district, namely the Rajolibanda Diversion Scheme and the Tungabhadra Project. The Rajolibanda Diversion Scheme, a joint venture of Mysore and Andhra Pradesh Governments, consists of an anicut of 2,690 feet long with flooded banks on either side across the Tungabhadra river near Rajolibanda village in Manvi taluk and a 72-mile long canal, which, after covering a length of 27 miles in Mysore State, enters Andhra Pradesh. The construction of the anicut was taken up in the year 1947 by the then Government of Hyderabad. It was completed in 1962 at an estimated cost of Rs. 433 lakhs and the water was allowed in the main canal during the same year creating an irrigational potential of 5,879 acres in this State. The anicut is a Ogee-shaped weir designed to discharge a maximum flood height of 12 feet. The maximum height of the anicut, above the deepest foundation is 31 feet. The canal head regulator consists of five vents of 6 feet by 7 feet with sill R.L. 1082.00. The anicut and canal works, including the construction of the distributaries from No. 1 to 12 falling within Mysore State limits, have been completed and water has been made available for an area of 5,772 acres. Construction of watercourses and field channels upto the last survey number has also been completed. However, the area so far developed is about 5,250 acres.

The maximum quantity of water that can be made use of by the Governments of Mysore and Andhra Pradesh from this scheme is only 17 T.M. Cft. Out of this, the share of the Mysore Government, at present, is only 1.15 T.M.Cft. and that of Andhra Pradesh 15.85 T.M.Cft. So the canal is designed for a discharge of 850 cusecs at the head point. The sharing of the discharged water between Mysore and Andhra Pradesh Governments is, at present, of the order of 80:770 cusecs. It is proposed to raise the existing banks of the canal so as to carry the maximum discharge of 850 cusecs at the head point. A revised estimate for the common portion of the canal from mile 0 to 27 is made at Rs. 250.94 lakhs. The twelve distributaries of the canal serve nearly fifteen villages of Raichur district, namely Hanumapur, Yedalapur, Bichal, Gillesugur, Tungabhadra, Bullapur, Gandhal, Chik-Manchal, Gundervalli, Budinni, Malkapur, Mirzapur, Idapnur, Gangwar and Talmari. The distributary No. 5, which passes nearby the villages of Tungabhadra and Gillesugur, is the biggest distributary, irrigating 808 acres.

The gross command area of the canal upto 27 miles in the district is about 8,015 acres, of which 5,879 acres are localised for irrigation, the intensity of irrigation being 73 per cent. The entire area of 5,879 acres has been localised on the following pattern :—

1.	Abi Paddy	..	1,600 acres
2.	Tabi Paddy	..	500 acres
3.	Light Irrigated crops	..	3,220 acres
4.	Garden crops	..	559 acres
	Total	..	5,879 acres

A statement showing the village-wise and distributary-wise localised area under the Rajolibanda Diversion Scheme is appended at the end of the chapter.

Tungabhadra Project

Sir Arthur Cotton, who was called the "Irrigation Wizard of the South", drafted a report in 1860 on the possibilities of a Tungabhadra irrigation scheme, and later on, a note was prepared by Col. Smart which was submitted to the Indian Irrigation Commission in 1902. Consequent on the recommendations of the Ceded Districts Irrigation Committee, constituted in 1925, the prospect of evolving a joint venture under the Governments of Hyderabad and Madras became bright and it was at this stage that the negotiations started between the two Governments. A tentative agreement was arrived at in 1933 at a conference of Chief Engineers of both the States to share the available waters through the project and the scheme was accordingly revised in the same year. However, the project work could not be pushed through

for want of agreement among the Governments of Madras, Mysore and Hyderabad on outstanding questions, such as dependable flow, etc. After a conference of representatives of the Governments of Madras, Hyderabad, Bombay and Mysore, the Government of Madras approached the Government of India for the appointment of an Inter-State Commission which could take a decision on the equitable sharing of waters by the four Governments. Later on, during 1936, representatives of the Governments of Madras and Mysore met at a meeting and came to an agreement. In 1938, Madras and Hyderabad Governments conferred on the basic issues and arrived at an agreement for partial utilisation of the available supply of water to the extent of 50 T.M.Cft. each for new irrigation and 15 T.M.Cft. extra for Hyderabad for power generation which, after allowed into the river, could be utilised by Madras Government for new or old irrigation. The Government of Madras ordered a detailed investigation of the scheme in 1940. Based on the agreement mentioned above and the examination of a number of alternatives and investigations, two new schemes were proposed and agreed to by all the Governments.

Inter-State agreements

In the month of June 1944, an agreement was reached between the Governments of Madras and Hyderabad. The following were the salient features of this agreement* :—

(i) To start immediately a joint scheme between Hyderabad and Madras for a partial appropriation of Tungabhadra waters at Mallapuram, leaving all matters of absolute rights, claims and disputed points for future settlement.

(ii) A partial utilisation of the available flow upto 65 T.M.Cft. on each side which included the supply for the existing and new irrigation, the assistance to the Kurnool—Cuddapah Canal and the Rajolibanda Canal, the latter being treated on equal status with the former.

(iii) To have a dam constructed at Mallapuram to impound a sufficient quantity for a large eventual utilisation than now agreed to, and to share half the cost of such construction.

(iv) The canal capacities on each side not to be restricted to utilise their respective share of 65 T.M.Cft. only; in designing them for high capacities, each Government taking their own risk.

*Tungabhadra Project, 1945-58, Tungabhadra Board, Bellary District Mysore State.

(v) The natural flow below Mallapuram to be divided half and half at the point of diversion of the Rajolibanda Canal, after making an extra allowance to the Rajolibanda Canal equivalent to the additional draw-off by the Madras pre-Mughal channels over the draw-off of pre-Mughal channels of Hyderabad.

Another agreement was arrived at between the Governments of Madras and Mysore during the month of July 1944. The important features of that agreement were as follows :—

(i) Mysore to draw 57 T.M.Cft. for the Lakkavalli reservoir and a further quantity for power which would be restored to the river after development of power.

(ii) 15 T.M.Cft. for the Tunga anicut extension.

(iii) Mysore not to claim any share from the net available flows at Mallapuram after deducting the abstracts above the dam .

An Inter-State Conference was held at Bangalore on 18th June 1956, under the chairmanship of Shri V. T. Krishnamachari, the then Deputy Chairman of the Planning Commission. The important features of the agreement reached at this conference were :—

(i) The waters of the High Level Canal to be shared in the ratio of 35:65 between the Governments of Mysore and Andhra Pradesh.

(ii) The execution of the common works in respect of the High Level Canal scheme to be undertaken by the Tungabhadra Board and the Chief Engineer of the Board to take up immediately the planning and designing of the canal with such changes as may be required as a result of the sharing now agreed to.

(iii) The cost of the common works of the canal to be shared generally on cusec mile basis.

Another Inter-State Conference was held on the 5th and 6th of October 1957 at the Tungabhadra Dam to consider certain outstanding issues relating to the Tungabhadra Project (right side). The salient features of the agreement entered into at that conference were as given below :—

(i) Benefits under the Low Level Canal to be shared on the basis of water requirements of the areas localised in Andhra Pradesh and Mysore.

(ii) Power benefits from both the stages of the project to be shared between Mysore and Andhra Pradesh in

the rato of 1 : 3 until the first generating unit of the Sharavati Hydro-Electric Scheme is commissioned and thereafter 1 : 4.

(iii) Liability on account of the headworks to be shared by Andhra Pradesh and Mysore for the time being in the proportion of the quantities of water stored for them for the Low Level Canal, subject to the proportion being readjusted as soon as the High Level Canal is sanctioned.

(iv) Liability on account of the Power Canal to be shared by the two States in proportion to the quantities of water carried for them for purposes of irrigation under the Low Level Canal.

(v) Assets attributable to headworks and Power Canal to be shared by Andhra Pradesh and Mysore in the same manner as liabilities.

(vi) The Hydro-Electric Scheme to pay to the irrigation side of the project a contribution of Rs. 7.50 per K.W. year from the date of commissioning of the first unit for a period of five years and this rate to be reviewed at the end of that period.

(vii) Assets and liabilities on account of both the stages of power development to be allocated between Andhra Pradesh and Mysore in the ratio in which benefits are shared by them.

(viii) The public debt on account of the expenditure incurred on the project prior to the 1st October 1953 (both on the irrigation and the hydro-electric side) to be shared by Andhra Pradesh and Mysore in the same ratio as expenditure incurred after that date under the different heads (such as Headworks, Power Canal, Low Level Canal and Hydro-Electric Scheme) is shared by them.

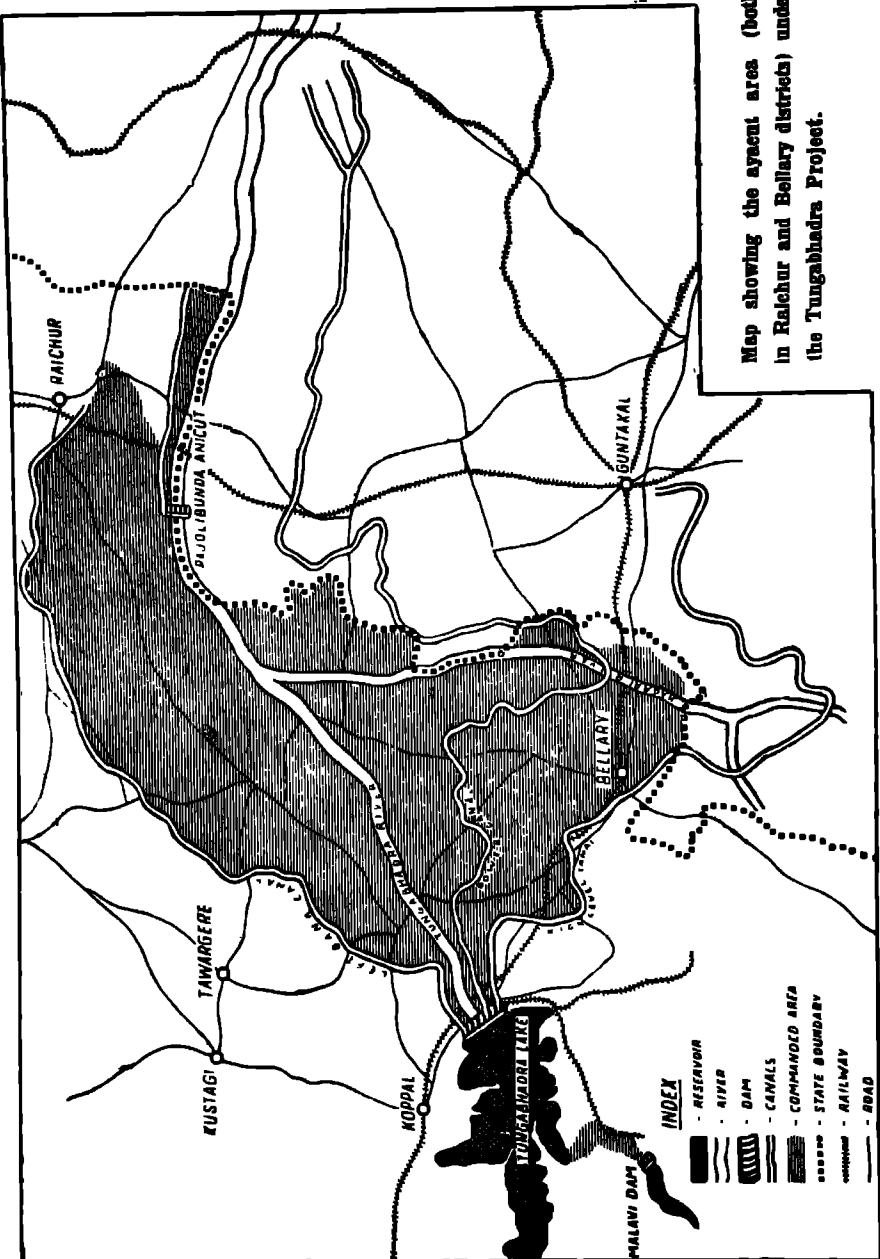
The earlier two agreements (of 1944) mentioned above finally prepared the ground for the execution of the Tungabhadra Project. The scheme for the left side of the river provided a canal in Raichur district and development of power at the foot of the dam and at various drops along the canal. The project was officially commenced on 28th February 1945 as a joint venture of the Governments of Madras and Hyderabad. The construction of the dam and excavations of a part of the canal system were completed by 1953 and water was first made available for irrigation on 1st July 1953. The work was continued after 1st October 1953 by the three Governments of Andhra, Madras and Mysore. After the re-organisation of States in November 1956, it became the concern of the Governments of Andhra Pradesh and Mysore.

The project was started as a post-war development scheme and subsequently came under the purview of the successive Five Year Plans. It is basically a protective one, affording some protection to the badly affected famine regions, and the benefits are spread over as wide an area as possible for overcoming the vagaries of rainfall. The waters of the river Tungabhadra had been put to use for irrigation purposes by a number of diversions, but the Tungabhadra Reservoir has been the first major reservoir put into operation.

Salient features

The dam, across the river Tungabhadra, is situated at about 6 kms. from Hospet, a railway station on the Hubli-Guntkal rail link of the Southern Railway. The storage dam is of a medium-sized gravity, consisting of a main dam in masonry, 5,712 feet in length, an earthen dam of 500 feet long and a composite dam of 1,527 feet long, with a maximum height of 162 feet over the deepest foundations. The spill-way is designed for a maximum discharge of 6,50,000 cusecs and this is disposed off through 33 lift-type crust gates. There is a vast expanse of water-spread of over 146 square miles.

The catchment area of the reservoir is 10,880 square miles and this has resulted in the submergence of 39,180 acres of land in Raichur district alone, affecting 5,395 houses and 22,752 persons dwelling in 40 villages that were within the revenue limits of Koppal taluk.

The most important work entrusted to the development office of the Tungabhadra Project area in the First Plan period, was the rehabilitation of villages submerged in the water-spread. Out of 40 villages, 10 were completely submerged and the remaining were partially affected. The people of the completely submerged villages were induced to move into the ayacut area where they had better prospects. The amount of compensation sanctioned to lands and houses which were submerged, was arranged to be drawn upon gradually by the awardees for the purchase of new lands and for the construction of new houses. A co-operative store was also established to supply the building materials. Twenty-one rehabilitation centres were started on the foreshore for the re-settlement of the partially submerged villages. Houses, wells, internal roads, schools, community halls and places of religious worship were all provided. Five acres of Government land was given to each family free of cost. Lands were also acquired from surplus holders and allotted to the re-settlers who wanted more land on payment of the cost. Free grants to the deserving families and *taccavi* loans for improvement of lands and house-building were also generously given. In addition to these 21 centres on the foreshore, 10 more centres were opened in the ayacut area. Thus, in all, 31 new villages sprang up and 18,000 resettlers were rehabilitated. The cost to

Map showing the ayacut area (both in Raichur and Bellary districts) under the Tungabhadra Project.

Government on this account was about Rs. 38 lakhs. The following statement gives details of the number of villages affected by the waterspread of the Tungabhadra reservoir and the area submerged in each village of Raichur district and new rehabilitation centres started in the ayacut area and on the foreshore :—

Sl. No.	*Name of village*	*Area affected, inclusive of Government land*	*Sl. No.*	*Name of rehabilitation colony*
1	2	3	4	5
		A. G.		
1.	Mannoor ..	834—39 ..		**In the Ayacut**
2.	Lingapur ..	2,045—31 ..	1.	Hossahalli
3.	Rampur ..	1,546—04 ..	2.	Egalkera
4.	Koregal ..	2,049—20 ..	3.	Shivapur
5.	Timmalapur ..	923—31 ..	4.	Kamsagar
6.	Sangameshvar ..	960—09 ..	5.	Odderhatti
7.	Singapur ..	635—32 ..	6.	Jangamar-Kalgudi
8.	Gandehosalli ..	1,268 —21 ..	7.	Siddapur
9.	Hadramaggi ..	939—15 ..	8.	Heroor
10.	Sankalapur ..	1,413—20 ..	9.	Hanwal-Guldhal
11.	Yellogi-Gunda ..	1,619—12 ..	10.	Mushtoor
12.	Silodi ..	1,025—12 ..		**On the foreshore**
13.	Belvinahal ..	1,470—13 ..	1.	Kanakapur
14.	Akkapoor ..	732—00 ..	2.	Allanagar
15.	Pura ..	310—00 ..	3.	Hireboganhal
16.	Mundargi ..	1,7048—26 ..	4.	Chickboganhal
17.	Hyati ..	1,592—17 ..	5.	Kirkehalli
18.	Gudlapur ..	1,247—17 ..	6.	Lachankeri
19.	Katarki ..	1,706—15 ..	7.	Mundargi
20.	Mattoor ..	1,843—18 ..	8.	Hyati
21.	Neeralgi ..	1,087—39 ..	9.	Dombarahalli
22.	Hunkunti ..	709—04 ..	10.	Belur
23.	Tigari ..	1,215—13 ..	11.	Gudlur-Katarki
24.	Hireboganhal ..	1,018—24 ..	12.	Gondbal
25.	Boohanahalli ..	736—06 ..	13.	Neeralgi
26.	Dachankeri ..	532—21 ..	14.	Mattoor
27.	Keslapur ..	263—11 ..	15.	Hunkunti
28.	Gondbal ..	1,457—20 ..	16.	Boohanahalli
29.	Halwagli ..	820—13 ..	17.	Nilogi
30.	Belur ..	544—10 ..	18.	Tigari

1	2	3	4
31.	Chickboganhal ..	950—00	.. 19. Halwagli
32.	Kirkehalli ..	2,290—01	.. 20. Keslapur
33.	Nilogi ..	937—11	.. 21. Bhagyanagar
34.	Dombarahalli ..	79—37	
35.	Mallekeri ..	199—14	
36.	Budihal ..	66—14	
37.	Muddaballi ..	39—26	
38.	Hydernagar ..	00—23	
39.	Hirekasankhandi	268—06	
40.	Hulimuddapur ..	50—00	
	Total ..	39,173—34 or 39,180—00	

A serious problem before the Tungabhadra Board is that of sedimentation. As per the sedimentation survey of the Tungabhadra Reservoir carried out by the Director, Mysore Engineering Research Station, Krishnarajasagar, under the fundamental and basic research programme sponsored by the Government of India, it is seen that 4,10,500 acre-feet of silt has accumulated in the reservoir as per computed capacity. The loss in capacity of the reservoir due to siltation is 377.29 acre-feet per 100 sq. miles of water-shed area per year on the average. Compared with the original capacity, the total loss so far is said to be 13.49 per cent over a period of ten years. As the quantity of the inflow of sediment into the Tungabhadra reservoir through the Hirehalla stream has been large, it has been proposed to construct an anicut across Hirehalla stream in Koppal taluk. Afforestation work on the foreshore has been also taken up.

Left Bank Canal

The command area of the Tungabhadra Project is fed by three canals, *viz.*, the Left Bank Canal in Raichur district, the High Level Canal and the Low Level Canal in Bellary district. Investigations for the construction of the Left Bank Canal in Raichur district were started as early as 1929 and the scheme was finally approved by the then Government of Hyderabad at an estimated cost of Rs. 17,44,37,142 after examining all the reports submitted to it by various committees in 1934, 1936 and 1943. The Left Bank Canal, nearly 141 miles long, runs for the first nineteen miles in a rugged country, cutting through hill ranges and passing through three subsidiary reservoirs, one at Shivapur and the other two at Sanapur, comprising of 64, 74 and 67 feet masonry and composite dams, respectively, at the 8th, 11th and 14th miles of the canal. Finally, the canal, at its 22nd mile,

enters upon an open country after negotiating a range of hills through a tunnel called Papaiah Tunnel.

Papaiah Tunnel

The Papaiah Tunnel, 3,557 feet long (1,084 metres) and 22 feet wide and 13 feet deep, is met with in the range of hills locally known as "Sath Pahad" before the canal enters upon an open country in Gangavati taluk. The canal, at this stage, passes through high ridges which involved deep cuttings. To avoid deep cutting of hard rocks and economise the cost of work, a tunnel, at a cost of Rs. 52.22 lakhs, has been constructed. It is named after the late Shri Papaiah, the then Chief Engineer.

The canal is designed to carry a discharge of 7,000 cusecs of water for the first fifteen miles for power development and thereafter 3,100 cusecs for irrigation. The computed maximum discharge of the canal is 45,540 cusecs. The canal crosses 19 aqueducts, 73 culverts and a few nala diversions. The most important aqueducts are across Kanakgiri stream at mile 31, Heera stream at mile 41, Kanakanala stream at mile 58, Maski stream at mile 69 and Mallat stream at mile 96. The biggest of them is Maski aqueduct at mile 69, which consists of 11 vents of 46 feet width and 22 feet 6 inches height.

There are six to seven drops at different places ranging from a height of 1.5 feet to 30.5 feet with a number of escapes at regular intervals along the canal in order to regulate the flow of water and to have better control over the flow. The highest drop is provided at mile 16. The canal from mile 24 to mile 127 is designed to suit the needs of navigation as well and, for this purpose, wharfs have been constructed at ten selected places.

There are, in all, 106 distributaries, in addition to field channels and watercourses, the biggest of them being the distributary No. 54, which is of a length of 26 miles irrigating an area of 80,812 acres and carrying a discharge of 379 cusecs of water, and the smallest being distributary No. 23, which is of a length of one furlong, irrigating an area of 108 acres, with a discharge capacity of 0.91 cusec. Out of the total length of 141 miles, the canal upto the 34th mile and distributaries upto 35th mile were completed by the end of 1957-58. During the first two years of the Second Plan period, the construction of main canal upto 52nd mile and distributaries upto 38th mile was completed. The year 1958-59 saw the canal extended upto the 65th mile and the distributaries upto 54th mile. The rest of the canal construction was completed in subsequent years and opened for the flow of water by reach-wise. The last reach of the canal and the last distributary were opened for the flow of water in July 1968.

As per the Hyderabad Irrigation Act, 1357 Fasli (1947 A.D.), the field channels were constructed upto the capacity of

three cusecs with the intention that the beneficiaries would construct and maintain field channels below that capacity out of their own resources. In view of lack of co-ordination among the beneficiaries and the slow development of the ayacut area, the Government of Mysore, in 1962, took up the construction of water-courses of more than one cusec also. It was expected that the field channels having the capacity of less than one cusec would be constructed and maintained by the beneficiaries. However, the Government, in 1966, ordered the construction of field channels also to each survey number and a part thereof leaving the work of maintenance of such channels to the beneficiaries. It is expected that the construction of field channels over the entire ayacut area will be provided by the end of March 1970. The total cost of the entire work on the Left Bank Canal side, as per the revised estimates, would be Rs. 38,55,29,430 and the outlay upto the end of March 1968 was Rs. 23,03,93,702.

In order to minimise the frequent breaches in the banks of the canal and repeated interruptions in the discharge of water and to eliminate anxiety among the cultivators, the work of strengthening of banks all along the entire reach of the canal has been taken up by the Public Works Department. For purposes of quickening the repair work of the breaches in the canal, a branch-squad has been formed which attends to the work immediately.

The Tungabhadra Left Bank Canal is intended to irrigate an ayacut of 5,80,000 acres under the following cropping pattern :—

Name of crop		*Area localised*
Abi Paddy	.. ..	50,000 acres
Tabi Paddy	.. ..	10,000 acres
Sugarcane	.. ..	15,000 acres
Khariff (Light)	.. ..	2,00,000 acres
Rabi (Light)	.. ..	2,00,000 acres
Cotton	.. ..	75,000 acres
Garden	.. ..	30,000 acres
	Total ..	5,80,000 acres

Irrigation practices

In order to make the most efficient use of the available water, special methods and practices in irrigation, based on the climate, soil and such other conditions, have been followed. As the Tungabhadra Project is essentially planned for providing water to as large an area as possible, the practice of dry or light irrigation has been proposed. Dry irrigation simply means an assured supply of water to the dry crops like cotton, groundnut, jowar, etc., which are normally raised on unirrigated lands depending upon the rainfall.

The general methods followed in the district, for purposes of irrigating the fields, are Contour Border Strip Method, Flat Bed Method, Redgerx Furrow Irrigation Method, Ring Basin Method and Sprinkler Irrigation. The Contour Border Strip Method, specially designed to allow sufficient water to enter into the soil by the time the water reaches the take end of the strip, is practised in places where the range of slope of the surface area is between one to two per cent, in order to check the hazards of soil erosion whenever there are erratic downpours. This method is practised for growing crops like jowar, maize, groundnut, cotton, wheat, sateria, bajra, ragi, etc. The Flat Bed Method of irrigation, which ensures a uniform application of water to the soil, is very popular in the district and is mostly followed in respect of crops like paddy, ragi, etc. The Furrow Irrigation Method is one of the improved methods of irrigation. It is cheap and convenient and it also ensures uniform supply of water. It is mostly followed for growing crops like sugarcane, chillies, brinjal, tomato, etc. This can be followed in all kinds of soils irrespective of the topography of the land. In some farms where intensive farming is taken up, sprinkler irrigation is followed. It is a method of applying water to the surface of the soil in the form of a spray, somewhat as in ordinary rain. Movable pipes, with rotating nostles at frequent intervals, are most commonly used at the crop level in order to cover the area as effectively as possible. The pumping plant supplies the water under pressure and conveys it through the main pipe line and the lateral lines to the sprinklers which distribute the water over the land. In Raichur district, three sprinkler irrigation sets are located in Lingsugur, Koppal and Sindhanur taluks. This system ensures efficient use of water and fertilisers. Though the system is good, it is not very popular because of its very high initial investment towards the cost of equipment.

Extent of irrigation

The Left Bank Canal supplies water to six of the nine taluks of Raichur district. The gross command area of the canal is 10,80,000 acres and the cultivable command area is 8,00,000 acres, whereas the area proposed for irrigation is 5,80,000 acres. The canal provides water for 420 villages spread over six ayacut taluks, namely Raichur, Deodurg, Gangavati, Manvi, Sindhanur and Koppal. The number of villages benefited by the canal in each taluk is as follows :—

Sl. No.	*Taluk*	*Number of villages benefited*
1.	Koppal	16
2.	Gangavati	74
3.	Sindhanur	146
4.	Manvi	128
5.	Deodurg	8
6.	Raichur	48
	Total	420

Sindhanur and Manvi taluks get the maximum benefit from the canal. Out of the total irrigable area of 5,80,000 acres, the Public Works Department created real irrigation potential to an area of 5,77,700 acres upto the end of 1968-69 by constructing field channels and watercourses. The following table presents the yearwise progress of the actual area brought under irrigated crops from 1954-55 to 1968-69 :—

Sl. No.	Year		Irrigation potential created	Area brought under irrigation (non-intensive)	Area brought under irrigation (intensive)
1.	1954-55	..	5,000	..	..
2.	1955-56	..	10,316	10,298	..
3.	1956-57	..	30,000	18,000	..
4.	1957-58	..	34,000	28,659	..
5.	1958-59	..	1,00,430	40,654	..
6.	1959-60	..	1,24,000	54,000	..
7.	1960-61	..	1,95,000	1,26,000	..
8.	1961-62	..	2,64,000	1,67,000	..
9.	1962-63	..	2,77,000	2,11,000	..
10.	1963-64	..	2,83,000	2,21,000	..
11.	1964-65	..	3,00,000	2,50,000	..
12.	1965-66	..	4,70,000	3,94,000	..
13.	1966-67	..	5,02,508	3,97,005	..
14.	1967-78	..	5,52,626	4,10,103	1,23,765
15.	1968-69	..	5,77,700	4,40,103	1,75,801

The above table shows that the area intensively developed, as in 1968-69, was only 1,75,801 acres, whereas water had been made available to an area of 5,77,700 acres.

Localisation Scheme

In order to provide maximum benefit, out of the available water, to the farmers, a scheme of localisation of irrigated lands for different kinds of irrigation and fixing up of blocks for various crops, depending upon the topographic situation, drainage conditions, inherent properties of the soil, human and animal resources and the intensity of irrigation under a particular distributary, is in operation in the district. Extension of irrigational facilities to as large an area as possible, economisation of the use of water, adoption of block system of irrigation and reduction of the intensity of the water flow are some of the main objectives of the scheme. In implementing the scheme, a systematised survey was taken up in order to ensure that (i) each village had its share of irrigation, (ii) wet and dry blocks were arranged in a good proportion and (iii) continuous bits of fertile lands were chosen for wet blocks. Blocks of lands have been localised not only

for wet and dry crops, but also for sugarcane, paddy and other light-irrigated crops as detailed hereunder :—

Crops			*Acreage*
Sugarcane	..	..	15,000
Abi Paddy	..	..	50,000
Tabi Paddy	..	..	10,000
Light Irrigated Khariff Crops	..	..	2,00,000
Mid-Rabi Cotton	..	..	75,000
Light Irrigated Rabi Crops	..	..	2,00,000
Garden Crops	..	..	30,000
		Total ..	5,80,000

The localisation work was started in the year 1950. The Public Works Department, represented by the irrigation unit of the localisation scheme, first surveyed the gross command area, marked the high or elevated lands and arrived at the irrigable command. This information was passed on to the agricultural unit, which examined every survey number falling within the irrigable command, classified the soils into different grades and fixed the crops to be grown in each grade of soil. The details of the classification of soils into different grades are already dealt with under soils. After gaining a thorough knowledge of the soil characteristics and drainage conditions, and, at the same time, keeping in view the cropping scheme and the intensity of irrigation, the irrigation blocks have been fixed for various types of irrigated crops. The entire irrigable area under the Left Bank Canal is localised under the following types of irrigation :—

Heavy irrigation	..	Paddy and sugarcane
Garden	..	Perennial and seasonal crops
Light or protective irrigation		Khariff and Rabi crops

Heavy irrigation is usually avoided within four furlongs of the human habitation, but such lands, if localised, were to be reserved for light irrigated crops only. As far as possible, localisation has been done restricting the farmers to grow crops of a particular kind in large well-defined blocks, under a single distributary or field channel, and care has been taken to ensure that water-logging is reduced to the minimum by localising heavy irrigated lands adjacent to natural drainages. Details of localisation completed upto the last distributary are presented in a table appended at the end of the chapter.

The actual progress of localisation work, commencing from 1954 to the end of 1967, and the year of its completion, can be gauged from the following statement :—

Year	Localisation done (Progressive total)
1954–55	45,200 acres
1955–56	2,04,234 acres
1956–57	3,88,578 acres
1957–58	4,91,116 acres
1959–60	5,46,894 acres
1960–61	5,54,651 acres
1964–65	5,80,000 acres
1966–67	5,98,593 acres

From the above statement, it is clear that 18,593 acres are localised in excess of the sanctioned cropping pattern of 5.8 lakh acres. This excess area includes the extent of 8,832 acres irrigated under pre-Mughal Channels and 10,041 acres acquired for roads, distributaries, high lands, etc., in the ayacut area.

Upper Krishna Project

The Upper Krishna Project is another mighty project undertaken by the Government ; this will immensely help the dry areas of Raichur, Bijapur and Gulbarga districts. It is proposed to make use of the vast water resources of the Krishna for this project. This river flows for a distance of 104 miles bordering the district of Raichur in the north. Under the present project, two major storage reservoirs will be provided, one at Alamatti in Bijapur district with a left bank canal and another at Siddapur in Muddebihal taluk of the same district with left and right bank canals by constructing dams across the river Krishna. The first stage of the project is presently under execution. The project will bring about 19.5 lakh acres of land under irrigation in the fertile but arid tracts of Bijapur, Gulbarga and Raichur districts. Out of this, an extent of about five lakh acres will come under the irrigable command of Narayanapur Right Bank Canal. The Narayanapur Right Bank Main Canal will take off from Narayanapur Reservoir (near Siddapur) at sill level 1580 and pass through Lingsugur and Deodurg taluks to a distance of 55 miles. Further, it bifurcates itself into two branches, *viz.*, Raichur branch and Maski branch. The Raichur branch will pass through Raichur taluk to a distance of 42 miles. The Maski branch, nearly 36 miles long, will pass through Manvi taluk and end in Lingsugur taluk. The proposed taluk-wise command area, in Raichur district, under the Narayanapur Right Bank Canal is as given below :—

Taluk	Area
Lingsugur	88,215 acres
Deodurg	2,15,903 acres
Raichur	1,14,580 acres
Manvi	45,302 acres
Total	5,00,000 acres

The cost of Narayanapur Right Bank Canal is estimated at Rs. 1,800 lakhs. The construction of the canal is proposed to be taken up during the II stage of the project, by about 1975, and completed in 1983.

Irrigation potential

The actual irrigational potential created so far in the district from different sources is as follows :—

(1) Irrigation by wells	.. ..	1,07,500 acres
(2) Irrigation through tanks	..	12,273 acres
(3) Irrigation through old Vijayanagara Channels	.. ..	5,780 acres
(4) Rajolibanda Diversion Scheme	..	5,879 acres
(5) Tungabhadra Left Bank Canal	..	5,80,000 acres
Total	..	7,11,441 acres

While the total irrigational potential created in the district is 7,11,441 acres, which is about 26.7 per cent of the cropped area, the water potential of the district is estimated at 32,000 million cubic feet on empirical basis. The proposed Upper Krishna storage project may irrigate about another 5.00 lakh acres in the district.

Irrigation management

The maintenance and management of the major sources of irrigation, including tank irrigation, rest with the Public Works Department. The ayacut development staff is entrusted with the management of the irrigation water. The distribution of water is regulated at the outlet points of distributaries. The officers appointed for the purpose work out the requirements of water in each distributary according to the number of acres localised under that distributary. Only the required quantum of water is let out in that particular distributary. This is regulated with a view to seeing that water reaches the lower portions of Raichur and Deodurg taluks and facilitates the irrigation programme in the entire command area. The programme is worked out in great detail by the irrigation engineers. A calculated quantum of water is let out from the main canal to each distributary, which would be sufficient for the area localised under that distributary. Supervisors and sluicemen are required to see that water is not unduly wasted and the cultivators are not allowed to take water direct to their fields from the distributary. The internal distribution of water beyond the outlet points rests with the ayacutdars. The water is supplied to perennial crops like sugarcane for eleven months in a year. In respect of paddy crops, water is made available during Khariff season only. In respect of light irrigated area, the farmer is permitted to irrigate only 50 per cent of the localised area under his control in Khariff season and the remaining 50 per cent in Rabi season

so that the entire area is covered. Thus, the percentages of areas covered under different types of irrigation are as follows :—

Wet irrigation	..	12 per cent
Perennial irrigation	..	2.7 per cent
Light irrigation	..	79.9 per cent
Garden	..	5.4 per cent

Water is first let out through the pipe outlet fixed on each distributary and the field channels take the water to the fields. The most difficult stage is where the water is let out from one cultivating field to another. There is the human element to be dealt with here. Various delicate situations are tackled, in an impartial way, by the revenue authorities through the *Necradies* (water regulators) or *Sawadies*, who have to ascertain the needs of farmers under a particular field and regulate the water supply.

As such methods of irrigation were unknown in the area previously, the distribution of water from one cultivator to another had been a problem. There had been several instances in Gangavati taluk where cultivators had tampered with the sluices by breaking open the shutters. In some cases, the field channels excavated by the Public Works Department had been closed by the cultivators. Various punitive measures were taken to prevent these illegal activities. A systematic propaganda drive was undertaken to tell the cultivators to level up their lands to conserve water. Unauthorised irrigation or violation of the principle of localisation is punishable under the Mysore Irrigation Act, 1965.

The entire area is divided into units, with an area of 15,000 to 20,000 acres under each unit, headed by a section officer of the cadre of a Junior Engineer or Supervisor. He is assisted by three to four Irrigation Inspectors, who are appointed for every 5,000 acres of ayacut area. These Inspectors are required to undergo a training in irrigation rules and practices before they are appointed and entrusted with the work. There are a number of committees called "Distributary Panchayat Committees" for solving irrigational problems arising within the area of their jurisdiction. The general problems concerning the development of the ayacut area are discussed at the meetings of the Tungabhadra Advisory Board or the Consultative Committees.

The low density of population per square mile, inadequate supply of labour, lack of sufficient bullock power, fairly large holdings, limited means of transport and communications and uneven surface of the land, coupled with lack of proper enterprising spirit and capital with the ayacutdars, contributed their share to the rather slow development of the ayacut area in the earlier stages.

Attracted by the ample irrigational facilities provided in the district, a number of families have migrated from the neighbouring districts of Andhra Pradesh into the ayacut area of this district and are carrying on farming. They moved to this district from Krishna and Godavari districts of Andhra Pradesh to take up cultivation of newly converted wet lands in the ayacut area. They left their native places after selling away the small extents of wet lands which they possessed for a good price and purchased large extents of dry lands in the ayacut area out of the sale proceeds and converted them into wet lands, irrigated by the canal water. Besides, about a thousand families of repatriates from Burma and Ceylon are also being rehabilitated near Jawalgera village in the Sindhanur taluk. These people are to be given an area of 5,000 acres reserved for them for cultivation. The first batch of these repatriates have already come and settled in this area and have begun to cultivate the lands.

Main Crops

The district had roughly 26,15,173 acres of cropped area (including current fallows) in 1967-68 which constituted nearly 76.7 per cent of the total geographical area of the district. The following tables show the area under each important crop (inclusive of both Khariff and Rabi seasons) for the years 1957-58, 1962-63 and 1966-67 :—

1957-58

(In Acres)

Sl. No.	Name of taluk	Paddy	Jowar	Bajra	Kangani	Wheat	Gram	Pulses	Ground-nut	Cotton	Karad	Sesamum
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Raichur ..	14,549	111,481	9,609	12,991	1,692	2,058	4,056	48,980	46,981	8,488	586
2.	Manvi ..	382	1,37,502	11,682	18,691	3,634	2,941	4,789	28,719	1,35,767	2,261	2,348
3.	Deodurg ..	1,047	97,088	10,821	2,974	2,484	2,302	13,713	32,151	62,818	4,162	1,484
4.	Lingsugur ..	450	1,48,386	40,331	11,408	12,053	5,145	48,584	45,339	79,610	670	11,672
5.	Kushtagi ..	1,550	78,491	19,974	16,449	10,772	3,823	46,785	43,576	31,765	3,208	3,448
6.	Sindhanur ..	217	1,02,903	9,708	36,231	2,455	3,046	6,943	4,490	1,57,191	1,205	305
7.	Koppal ..	2,680	43,356	5,073	14,028	13,773	1,699	14,509	45,017	30,032	2,510	2,550
8.	Yelburga ..	1,445	61,962	7,014	6,558	32,616	5,706	10,480	61,631	78,334	8,153	1,042
9.	Gangavati ..	7,647	15,468	4,096	19,226	749	1,308	11,334	31,075	60,327	1,809	2,783
	Total ..	29,967	7,96,637	1,10,308	1,38,556	80,228	28,030	1,61,193	3,40,978	6,81,765	32,463	26,218

1962-63

(In Acres)

Sl. No.	Name of taluk	Paddy	Jowar	Bajra	Maize	Wheat	Total cereals and small millets	Gram	Tur	Pulses
1	2	3	4	5	6	7	8	9	10	11
1.	Raichur ..	17,474	1,14,689	8,561	..	1,593	1,61,130	1,520	2,320	20,083
2	Manvi ..	80	1,74,810	18,980	..	3,402	2,05,819	4,901	4,300	1,681
3.	Sindhanur ..	1,982	1,19,073	10,208	8	2,684	1,64,953	4,076	1,773	5,194
4.	Gangavati ..	18,318	81,117	13,579	..	215	1,30,961	321	1,077	22,138
5.	Koppal ..	1,692	58,122	5,130	..	11,000	95,587	1,424	6,050	37,345
6.	Yelburga ..	1,491	64,509	8,846	..	33,120	1,24,819	5,817	5,811	38,984
7.	Kushtagi ..	2,042	85,954	21,419	..	10,416	1,29,833	2,477	16,216	35,996
8.	Lingsugur ..	253	1,24,668	30,762	36	11,009	1,77,093	4,302	14,852	5,149
9.	Deodurg ..	690	1,22,920	12,860	..	2,185	1,41,081	2,675	4,535	15,925
	Total ..	44,022	9,45,862	1,30,345	44	75,624	13,32,176	27,510	56,936	1,82,495

1962-63—(contd.)

(In Acres)

Sl. No.	Name of taluk	Ground-nut	Castor	Cotton	Sugar-cane	Total food-grains	Total pulses	Total oilseeds	Net sown area
1	2	12	13	14	15	16	17	18	19
1.	Raichur ..	23,045	115	42,622	174	1,85,053	23,923	29,600	2,59,719
2.	Manvi ..	12,103	201	1,53,383	..	2,16,701	10,882	25,315	4,02,479
3.	Sindhanur ..	1,431	285	1,56,167	17	1,75,996	11,043	11,750	3,47,477
4	Gangavati ..	13,529	77	49,918	9,470	1,54,497	23,536	14,154	2,88,359
5.	Koppal ..	42,205	290	28,225	3,152	1,40,403	44,016	46,380	2,20,614
6.	Yelburga ..	59,532	668	71,327	9	1,75,431	50,612	72,376	3,20,553
7.	Kushtagi ..	39,419	1,619	35,118	8	1,84,524	54,691	46,751	2,68,686
8.	Lingsugur ..	23,202	2,160	68,240	29	2,02,296	24,303	33,399	3,05,340
9	Deodurg ..	16,350	N.A.	62,375	10	1,64,216	23,135	21,584	2,49,435
	Total ..	2,30,816	5,424	6,67,375	12,869	15,99,117	2,66,941	3,01,309	26,02,662

1966-67

(In Acres)

Sl. No.	Name of taluk	Paddy	Jowar	Bajra	Total cereals and small millets	Wheat	Gram	Tur	Pulses
1	2	3	4	5	6	7	8	9	10
1.	Raichur ..	14,625	1,02,738	7,705	1,43,089	1,630	1,220	1,757	18,587
2.	Manvi ..	4,281	1,19,846	19,829	1,60,720	2,254	3,252	2,960	7,328
3.	Sindhanur ..	14,069	1,02,244	11,069	1,59,393	3,133	2,200	1,320	18,192
4.	Gangavati ..	23,494	42,066	10,780	96,316	11,306	1,438	6,002	20,499
5.	Koppal ..	2,942	51,940	4,583	88,881	7,200	1,320	5,562	35,508
6.	Yelburga ..	1,319	55,664	5,890	1,08,554	28,000	5,800	6,440	47,301
7.	Kushtagi ..	1,098	27,628	18,792	78,324	8,093	2,891	10,479	43,238
8.	Lingsugur ..	252	1,16,436	32,180	1,73,006	11,218	4,920	18,408	4,124
9.	Deodurg ..	882	1,20,122	15,730	1,39,555	2,821	2,415	3,860	1,050
	Total ..	63,883	7,38,684	1,26,558	11,47,868	75,655	25,456	56,788	1,95,827

1966-67—(*contd.*)

(In Acres)

Sl. No.	Name of taluk		Sugar-cane	Ground-nut	Castor	Cotton	Total food-grains	Total pulses	Total oilseeds	Net sown area
1	2		11	12	13	14	15	16	17	18
1.	Raichur	..	188	27,186	120	35,465	1,64,653	21,564	31,908	2,68,972
2.	Manvi	..	59	20,000	300	1,73,153	1,74,260	13,540	35,008	4,04,046
3.	Sindhanur	..	1,095	1,874	125	153,497	1,81,105	21,712	9,596	3,17,595
4.	Gangavati	..	13,479	64,212	1,630	44,490	1,24,285	27,939	71,091	2,48,333
5.	Koppal	..	2,583	37,103	260	27,835	1,31,271	42,390	41,089	1,89,229
6.	Yelburga	..	31	49,677	371	67,880	1,68,095	59,541	60,435	2,89,377
7.	Kushtagi	..	21	29,488	1,844	33,311	1,34,932	56,608	37,926	2,51,399
8.	Lingsugur	..	20	28,116	781	73,218	2,00,458	27,452	38,957	3,28,718
9.	Deodurg	..	7	23,914	45	71,619	1,46,880	7,325	35,477	2,94,567
	Total	..	17,483	2,81,570	5,476	6,80,468	14,25,939	2,78,071	3,61,487	25,92,236

Jowar is the most important cereal of the district and is almost entirely concentrated in the light irrigated tracts. Next in importance is bajra, which is chiefly grown in association with jowar, paddy and wheat. Groundnut among oilseeds and cotton among fibres are the most valuable commercial crops grown in the district.

The area under non-food crops is roughly more than half of the area under food crops. But it is seen that the bulk of the cultivated area is under food crops. The relatively greater importance given to commercial crops like cotton, groundnut, etc., represents a step towards increasing the money earning capacity of the cultivators. The district as a whole, in respect of crops grown, comes under the northern *maidan* region of the State. The taluks of Lingsugur, Deodurg, Koppal, Yelburga and Kushtagi are grouped under a central sub-region, growing crops like jowar, bajra, wheat, cotton, oilseeds and pulses and the rest of the taluks of Sindhanur, Manvi, Raichur and Gangavati are under a sub-region, Tungabhadra, growing crops like cotton, jowar, bajra, oil-seeds and pulses.

Cropping pattern

A study team of the University of Agricultural Sciences, Hebbal, has recommended the following cropping pattern, under light irrigation, for black cotton soils of the Tungabhadra Project area. While suggesting a suitable cropping pattern, they have taken cognisance of the system of localisation and the available information on various aspects of soil, climate, crop production, water management and marketing. They have recommended the following pattern for different seasons to be followed in the black cotton soils of the district:—

Khariff :—

(1) Hybrid Maize: Deccan or Ranjeet.
(2) Hybrid Jowar: CHS-1, D-340 and C7-1195.
(3) Hybrid Bajra: HB-1 and D-174.
(4) Sateria: K-221-1.
(5) Transplanted Ragi: Purna.

Groundnut, at present, has been found to be highly remunerative for cultivation in red soils.

As dry crops and second crops :—

(1) Mexican wheat;
(2) Bengalgram; and
(3) Safflower.

Rabi :—

(1) Mexican Wheat—Lermarojo and Senera-64.
(3) Hybrid Maize—Deccan and Ranjeet.
(3) Safflower as an entire crop.

(4) Hybrid Bajra or D-174.

(5) Jowar M-35-1 and M-47-3.

(6) Transplanted Ragi—Purna.

In the area localised for Rabi crop, the following short duration crops have been recommended to be grown as dry crops :—

(1) Hybrid Bajra,

(2) Sateria,

(3) Ragi—Purna,

(4) Pulses and, in addition, Sunnhemp or Sesbania may also be grown.

Cotton :

Lakshmi or Hampi (5110) variety to be sown during the second fortnight of August.

There is a possibility of raising certain crops such as chillies, onion, sateria and ragi as mixed crops with cotton. New crops such as soyabean and tobacco can also be introduced.

Paddy

Rice or paddy (*Oryza sativa*).—As per the final figures of 1967-68, the area under rice cultivation in the district was 25,603 hectares which constituted about 2.3 per cent of the area under rice cultivation in the State. This crop is mostly concentrated in the six ayacut taluks of the district. Paddy is a staple food-crop of the people in the taluks of Raichur, Gangavati, Sindhanur and Manvi. In the irrigated tracts, specially under heavy irrigation, paddy is transplanted and in rainfed area broadcast sowing of seeds or sprouts is followed. Abi, the autumn or monsoon or early paddy, also called main season paddy, is sown in June, transplanted in July and harvested in November-December. Tabi paddy, also called the summer paddy, is transplanted in January and harvested in March-April. The total area localised for paddy cultivation under the Left Bank Canal is 60,000 acres, of which 50,000 acres are for Abi paddy and another 10,000 acres for Tabi paddy. The new varieties of paddy that are being introduced in the district are TN-I., IR-8, IR-5, Rajahamsa, ADT-27, SR-26B, HR-35, HR-19, Selection 28, Krishna Basangi and Kichidi. Some of these varieties are early ripening, in about 90 to 120 days, and some are late ripening, in about 120 to 180 days. Specially recommended practices are followed for cultivating these improved varieties of paddy and special dosages of chemicals and fertilisers are also recommended. The yield per acre varies from 10 to 25 quintals. The district has an exportable surplus in respect of paddy crop.

Jowar

Jowar or great millet (*Sorghum vulgare*).—Jowar as the staple food crop of the district, is grown in an area of 3,82,977 hectares. In 1966-67, the area under jowar was 3,61,000 hectares which constituted nearly 13.8 per cent of the total area under jowar crop in the State. Among the jowar-growing districts of the State, Raichur has the third place. Jowar is the most important cereal and at the same time the largest and most widely grown food crop of the district. It is equally important as a fodder crop. It is essentially a crop of heavier soils. In parts, where soils are shallow, it gives place to bajra. The jowar crop may be grouped under three varieties, *viz.*, (1) the early sown or Khariff variety, (2) the late sown or Rabi variety and (3) the irrigated hot season variety, mostly grown for fodder. Khariff jowar is sown in medium and light soils during the month of July and harvested in December. Rabi jowar variety, grown mainly in black soils, is sown in September and harvested in February, and this variety is highly drought-resistant and thrives well under rainfall of 18 to 25 inches. This variety is predominant in Manvi and Sindhanur taluks. The hot season variety jowar is sown between November and February and it requires irrigation before it ripens. A good variety of jowar called Raichur variety is still popular, the other popular varieties being Dagdi and Maldandi. The improved hybrid and short duration varieties introduced in the district are D-340, Mathur, Basavanapada and local variety Khalsa. A special type of cultivation for these hybrid varieties is recommended under the package of practices programme. The district has an exportable surplus also in respect of jowar crop.

Bajra

Bajra (*Penniseturn typhoideum*) stands third in importance as the cultivated cereal crop of the district. The area under bajra, in 1967-68, was 59,702 hectares* as against 1,10,508 acres in 1957-58, 1,30,345 acres in 1962-63 and 1,26,558 acres in 1966-67. The decrease in area during 1966-67 was due to adverse seasonal conditions. It is grown in almost all parts of the district, but Manvi and Lingsugur taluks account for the largest acreage.

It is ordinarily grown as a Khariff crop and it grows well when the climate is moderately dry and when the monsoon rains come in light down-pours followed by plenty of sunshine. It is grown practically as a mixed crop. As a dry crop it is sown at the advent of south-west monsoon and harvested in September and October. Hybrid irrigated bajra is grown in medium black soils and red loams.

Among the bajra-growing districts of the State, Raichur takes the third place. Consumption of bajra in the district is very little and the crop grown is mostly exported outside the district. The improved strains introduced in the district are HB-I and D-174.

*one acre=0.405 hectare.

Mexican wheat

The area under wheat, as in 1967-68, was 32,303 hectares, (*i.e.*, 77,883 acres) as against 75,624 acres in 1962-63 and 75,665 acres in 1966-67. The district has the fifth place among the wheat-growing districts of the State. The chief wheat-growing taluks of the Raichur district are Yelburga, Lingsugur, Gangavati and Koppal. This crop is generally grown on silts, silt loams and clay loams of high fertility. As a dry crop, it grows well in deep black cotton soils. It is sown alone and sometimes mixed with safflower, linseed or gram and is generally rotated with cotton and jowar. When the crop is irrigated, lighter soils are selected as they ensure good drainage. The best varieties of wheat that were common in the district as distinguished by their trade name were 'Bansi', 'Lal' and 'Jod Gehoon'. 'Bansi' wheat is semi-hard, golden yellow or amber in colour, elongated in shape and it is ordinarily grown as a dry crop. 'Lal' variety of wheat is grown as a dry crop. 'Jod Gehoon' or spelt wheat is hard, red in colour, elongated and slender in appearance and is mostly grown as an irrigated crop. Mexican wheat, lermarojo, is a new variety introduced in the district. It is grown in all types of soils, except in very light and shallow soils. There is a surplus of Mexican wheat in the district.

Other Cereals

Maize (*Zea mays*) is cultivated as a Khariff crop and is usually followed by a Rabi crop of wheat. The area under maize in the district was 240 acres in 1967-68. It is grown also as a fodder crop. The popular varieties of this crop are Deccan hybrid, suitable for all seasons, composite variety and white maize. Among other cereals, ragi is also grown in a comparatively smaller area, particularly in loamy and well drained black soils, mostly under irrigated conditions. The area under this crop in 1966-67 was less than 500 hectares. Sateria *is another minor dry land food crop, which is grown in* medium black soils. Ordinarily, red loams are much favoured under normal rainfall for this crop. The important local varieties of sateria are HB-1 and D-174 for both Khariff and summer seasons.

The total area under cereals and small millets in the district was 13,32,176 acres in 1962-63 and 11,47,868 acres in 1966-67, which came to about 51 per cent of the net sown area ; the decrease during the latter year was due to adverse seasonal conditions.

Groundnut

Groundnut (*Arachis hypogaea*) is the major single oilseed crop grown extensively in more than five taluks of the district. Among the groundnut-growing districts of the State, Raichur district takes the fifth place, and among the taluks of the district, Gangavati takes the first place. Gangavati, Koppal and Yelburga taluks have larger areas under groundnut than that of other taluks. The total area under groundnut crop in the district was

3,40,978 acres in 1957-58, 2,30,816 acres in 1962-63 and 2,81,570 acres in 1966-67. The changes in monsoon conditions were responsible for this decrease in the area. Moreover, a part of the area under groundnut crop in 1957-58 was subsequently used for heavy irrigated crops and for other hybrid varieties. For example, Yelburga taluk had the largest acreage under groundnut, *i.e.*, 61,631, in 1957-58, but subsequently it fell to 59,532 acres in 1962-63 and to 49,677 acres in 1966-67 owing to this reason. The nuts are ordinarily used for human food and also as food for livestock or crushed for oil and oilcake.

As it is a hardy plant, it can easily be grown both as a dry and an irrigated crop. It needs little ploughing beyond weeding and it requires only a little manure except when grown for several years on a comparatively heavy soil. Two or three hoeings, before the nuts are formed, usually suffice. It is often grown in rotation with a cereal or cotton crop.

The two varieties of groundnut grown in Raichur district are the "Spread" or the trailing variety and "Bunch" or the erect variety. Plants under the erect variety have a bushy growth and the pods cluster round the bunched stems. Plants under the trailing variety or "Spread" variety creep along the ground and soon cover it; the pods are formed all along the ground in running stems. Erect varieties are easier to harvest and are more suited to heavier soils, while the trailing varieties give the highest yields on light soils. The "Bunch" variety is partially an irrigated crop and it is generally sown under well or canal irrigation.

No other commercial crop save cotton has assumed such a degree of importance in the agricultural economy of the district as groundnut. In the erstwhile Hyderabad State, groundnut crop was chiefly grown in Raichur, just like in other parts, as an exportable crop. Even as early as 1945, Raichur had the largest area under groundnut crop among the districts of the Hyderabad State.

The new hybrid varieties introduced in the district under package of practices of high yielding varieties are TMV-2, Assiriya Mwitunde and S-206 (both for Khariff and summer). Red and sandy soils are suited for TMV-2 variety of groundnut. It is grown both as an irrigated and rainfed crop. The yield from the crop, if grown under irrigated conditions, is almost double when compared with the yield of that grown under rainfed conditions. The Assiriya Mwitunde variety requires light soils and sandy loams. It does not thrive well in stiff clay, alkaline and acid soils. The yield from the crop is eight to ten quintals per acre if grown under rainfed conditions, whereas it rises to 20 to 25 quintals under irrigated conditions.

Castor

Castor (*Ricinus communis*) is another important oilseed grown in the district. The total area under this crop was 5,865 acres in 1967-68, as against 5,424 acres in 1962-63 and 5,476 acres in 1966-67. It is mostly an annual crop. Lingsugur taluk was one of the largest castor growing taluks in the erstwhile Hyderabad State. At present, Gangavati, Kushtagi and Lingsugur taluks have large areas under castor cultivation. The castor plant prefers a deep, free soil, of which the light soils and sandy loams of the district are typical. The Rabi castor is grown on black soils as the sole crop of the year. The crop is ordinarily sown in rainy season and lasts till the end of winter season. The harvesting is not uniform as the crop ripens at different stages. The popular varieties of castor that are being cultivated in the district are Rosy castor and NPH-1. NPH-1 is preferred to Rosy castor, because it is a drought-resistant and short duration crop. It can be better grown in medium black soils. Ordinarily, the crop is grown under rainfed conditions and as a mixed crop, in both Khariff and Rabi seasons.

Sesamum

Among the other oilseeds, sesamum (*Sesamum indicum*) and linseed are grown largely in the district. The total area under sesamum crop was 24,403 in 1967-68. It flourishes well on lighter soils, but ordinarily grows in all types of soils in the district. It is grown both as a Khariff and a Rabi crop. It does not withstand heavy rainfall when the plants are young. Raichur was one of the chief marketing centres in the erstwhile State of Hyderabad for sesamum. The crop is sown in June or July and harvested in September or October.

The area under linseed was 4,939 acres in 1967-68. The principal linseed-growing taluks of the district are Yelburga and Kushtagi.

The total acreage under all kinds of oilseeds in the district increased from 3,01,309 in 1962-63 to 3,61,487 in 1966-67.

Cotton

Cotton (*Gossypium* sp.) is, at present, the only single fibre crop grown in the district, and in respect of area it is next to jowar. Among the chief cotton-growing districts of the State Raichur has the first place insofar as the area under the crop is concerned, and among the taluks of the district, Sindhanur stands first. The total area under cotton in 1968-69 is roughly estimated at 7 lakh acres as against 6,67,375 acres in 1952-53 and 6,81,765 acres in 1957-58. The total area under cotton crop in the district comes to about 28.6 per cent of the total area under cotton in the State. Thus it is the most extensively grown commercial crop of the district. The following table shows the block-wise and

variety-wise acreage under cotton in the district during the year 1968-69 :—

Taluk/Block		Lakshmi	Hampi	Jayadhar	Total
Raichur	..	64,016	283	..	64,299
Sirvar	..	65,276	160	..	65,436
Manvi	..	72,869	524	15,000	88,393
Deodurg	..	50,120	51	500	50,671
Lingsugur	..	72,393	89	2,746	75,228
Sindhanur (Block I)	..	84,810	820	3,056	88,686
Sindhanur (Block II)	..	61,659	554	1,000	63,213
Kushtagi	..	47,360	18	..	47,378
Gangavati	..	16,325	200	9,200	25,725
Koppal	..	31,980	171	..	31,151
Yelburga	..	65,180	154	.	65,334
Total	..	6,41,988	3,024	31,502	6,76,514

The cultivation of cotton crop is mostly concentrated in the taluks of Sindhanur, Lingsugur, Manvi, Yelburga and Deodurg taluks. It is cultivated both as a Khariff and a Rabi crop.

The different varieties of cotton grown in the district are grouped under two broad kinds, namely 'Bowrie' and 'Bunsee', locally called 'Jawe Hatti' and 'Desi Hatti'. The 'Bowrie' variety has short staple and its colour is inclining to light-yellow. In respect of 'Bunsee' variety, the staple is long, white, fine and strong and hence this variety is generally favoured. New varieties like Lakshmi, Jayadhar and Hampi have been introduced. Of these, the Hampi variety is much favoured as it has long and fine staple. But the Jayadhar and R-5 varieties of cotton are largely grown in Manvi and Lingsugur taluks, while the Lakshmi variety is grown all over the district. The much favoured Hampi variety is largely grown in Gangavati, Sindhanur, Manvi and Raichur taluks, mostly under rainfed conditions.

In the erstwhile Hyderabad State also, Raichur was considered as a chief cotton-growing tract. The popular variety of cotton was called by the trade name Kumpta. The different varieties of cotton were also divided according to their botanical types in so far as they were grown in the district of Raichur, *viz.*, G. N. Cutchlca (Mungari or Mathio), a Khariff variety grown in all parts of Raichur, G. N. Malvensis, a Khariff variety grown in the north-eastern parts of Raichur, G. Hirsutum (American or

Buri), locally called Vilayithi Hatti, a Rabi variety grown on lighter black soils and G. Herbaceum (Hingari or Kumpta), a Rabi variety grown on heavier black soils.

Sowing of Khariff cotton is done from June to middle of July. The Rabi crop is sown in September or early part of October. The harvest season commences from the end of October or the beginning of November. There are usually four pickings, with an interval of three weeks between any two pickings. At present, most of the produce is marketed as *kapas* or unginned cotton. In respect of Hampi cotton, the number of pickings goes up to six with an interval of a fortnight between any two pickings. Crops raised on deep black soils yield four to six pickings, while those grown on light soils three pickings only.

Cotton is generally grown as a mixed crop with tur plant, which is sown after every 10 to 15 rows of cotton. The distance between the rows varies under rainfed and irrigated conditions. Cotton plants provide food for cattle in the form of seeds, leaves for sheep and goats and the dry stalks, if small in size serve the purpose of fuel.

In view of the importance of cotton as a commercial crop, a comprehensive scheme called Cotton Development Scheme was introduced in the district in April 1963. Various developmental activities are taken up under this scheme and it covers all the taluks of the district. Prior to the implementation of the scheme, a few varieties of cotton seeds were sown together on the same piece of land and the seed multiplication programme was not properly organised. Consequent on the introduction of the scheme, a rapid development has taken place in the coverage of the area under cotton crop and in the method of cultivation.

Cotton Development Scheme

The Cotton Development Scheme aims at obtaining higher returns from cotton by adopting better methods like selection of improved seeds, increasing the area under irrigated cotton, growing cotton in the bunded areas and in rice fallows, etc. The total area covered under this scheme in 1968-69 was 72,976 acres. Cotton seeds upto 3,556.13 quintals were distributed. Under a Centrally-sponsored scheme for cotton development, an area of 7,004 acres has been covered under intensive cultivation and 150 quintals of seeds have been distributed. Some of the equipments required for the cultivation of cotton were supplied at 50 per cent subsidised rates. In 1968-69, an area of 3,024 acres was covered under Hampi cotton. It is expected to bring about 25,000 acres under irrigated cotton, of which 20,000 acres would be under the Hampi variety and 5,000 acres under the Lakshmi variety. Seed-*cum*-fertiliser drills are being supplied at 25 per cent subsidised rates. Crop competitions are being conducted and prices are given to the successful candidates.

The yearwise area covered under improved and irrigated varieties of cotton in the district, during the years from 1966–67 to 1968–69, are presented below :—

Year			Area covered under improved varieties	Area brought under irrigated cotton
			Acres	Acres
1966–67	..	..	5,70,000	100
1967–68	..	..	6,11,000	3,000
1968–69	..	..	6,76,500	7,000

Since the inception of the scheme, the progressive total area covered under the improved varieties comes up to 6,76,500 acres, which is almost equal to the total area of the district under cotton crop, whereas the area brought under irrigated cotton is only 7,000 acres. The Centrally-sponsored scheme for maximising production of cotton in the areas of assured water supply is in operation since April 1968 in Raichur, Manvi and Sindhanur taluks.

The Hampi variety of cotton, released for general cultivation in 1966-67, has caught the imagination of the farmers. A large area of more than 30,000 acres was brought under Hampi cotton in 1969-70. An intensive plant protection scheme covering more than 7,000 acres is in operation and pesticides costing Rs. 7.50 lakhs have so far been distributed free among the growers of cotton. Plant protection equipments are being supplied at 50 per cent subsidised rates.

There is considerable scope for development of cotton cultivation in the district, as more than 75,000 acres of this crop are under irrigated conditions. The Indian Cotton Mills Federation, Bombay, has taken up a survey work in this district. They are considering the question of establishing a cotton project, in about 1,500 acres, by shifting the present project from Gokak to Raichur.

Sugarcane

Raichur has the sixth place among the sugarcane growing districts of the State. It covered an area of 12,869 acres in 1962-63 and 17,483 acres in 1966-67 as against 20,466 acres localised under the Left Bank Canal. The cultivation of this crop is mostly concentrated in Gangavati, Koppal and Sindhanur taluks where irrigational facilities are available. It is planted in rows on a raised bed and the water is made to rest in the furrows.

It is a twelve-month crop and requires water all through the year. The yield of sugarcane per acre in the district is rather low when compared to the other districts of the State. The University of Agricultural Sciences, Hebbal, conducted a survey in the district in order to find out the reason for this low production per acre. It was found that the low production was the result of not observing the principle of rotation of crops, ploughing deep in the soil, not using improved strains and not maintaining proper space between the rows, etc. The Department of Agriculture has taken measures to advise the growers to remedy these defects.

Pulses

Among the pulses grown in the district, gram is important. It is grown as a Rabi crop in deep black soils in tank beds. It is also grown as an irrigated crop by liberally manuring and regularly watering the plant. The crop is generally sown in October and harvested in February. The gram crop does well on soils of clay loams and it is used in a variety of ways. Its foliage and grain are used, when green, as fodder and vegetable. The foliage is often sun-dried and stored and used when required as fodder. The ripe grain is used for dhall or eaten parched or made into sweetmeats. It is also the commonest food for horses and is an excellent food for fattening sheep. It is a valuable rotation crop fit for cultivation on dry and irrigated lands as it is a restorative like other leguminous groups. There are four varieties of grain, *viz*., green gram or mung, redgram or tur, black gram or urd and horsegram.

Among the grams, redgram or tur is almost in daily use in the district. It is grown almost invariably as a mixed crop with the dry land cereals like ragi, jowar and sajje. The conditions of soil, climate, the season for sowing and the method of preparation of soil are all the same as required for dry land cereals. Lands are ploughed once and furrowed 3 to 4 times. The seed rate per acre is 5 kgs. The total area under pulses in the district was 1,82,495 acres in 1962-63 and 1,95,827 acres in 1966-67. It is grown on medium black and red loamy soils.

Agricultural operations

Agricultural operations change according to the nature of the crop, the quantity of rainfall and the nature of the soil of the tract. They consist of preparing the soil by digging or ploughing, pulverising the soil, application of manures and fertilisers, sowing the processed seeds or planting seedlings, interculturing, weeding, watering the crop, protecting the plants against pests and diseases and birds and cattle, harvesting, preparing the crops for the market and storing. Added to these processes, the farmers are also to provide permanent improvements to their lands in order *to better their fertility* and increase the yield, by taking measures such as bunding, levelling, draining the excess water from the lands, reclaiming the lands, etc.

Ploughing

Ploughing is an age-old process. The traditional method of ploughing is still found in many parts of the district though there is an awareness on the part of the farmers to change over to better methods. This operation is done in order to aerate the soil and to trap and store water for the crops. The system of ploughing is almost uniform in red soils throughout the district. A field is ordinarily ploughed twice, lengthwise and across the land, with the help of the wooden or iron plough. The plough is so designed as to leave a deep furrow of 7 inches by 10 inches in the soil. Red soil, locally called "Masab", is generally ploughed at the rate of an acre per day with the help of a plough drawn by a pair of bullocks. The deep black soils crack heavily in hot weather and "plough themselves". So it may not be necessary to carry out deep ploughing in such soils. Research work carried out at Sholapur has also indicated that deep ploughing in black soils even once in six years is not much advantageous. In medium black soils, however, ploughing with the help of an iron plough yoked to four or six bullocks, once in three or four years, would be advantageous, as it may help to catch more moisture in the soil.

In the case of hard soils (called 'Kharab' or 'Chowk'), the lands are ploughed every year with an eight-bullock plough. However, this is not the case in all places of the district, but only in places where the land is allowed to lie fallow for a long time. The preparation of soil for Khariff crop requires a four-bullock plough for every half an acre per day and for Rabi crop a twelve-bullock plough or a heavy iron plough worked by eight to twelve bullocks. The first rate soil of both Khariff and Rabi crops requires a heavy iron plough drawn by twelve bullocks if it is not ploughed for a period of ten to fifteen years. Till recently, the black soils were ploughed once in five to ten years. In view of the recent developments and package of practices followed in the field of agriculture, the fields are ordinarily ploughed once or twice every year. For ordinary soils, the land is not ploughed every year. It is sufficient if such lands are tilled with the help of levelling and sowing machines, and this practice is followed for all ordinary crops. But for all heavy irrigated crops, ploughing is done every year and for each crop. One week before sowing, water is allowed to the land and one or two shallow ploughings are done with the heavy iron plough. After this, the levelling plank is taken on the fields to prepare a good seed-bed.

Pulverisation

Pulverisation of the soil is done by one of the two implements, *viz.*, the beam harrow or the blade harrow. The blade harrow is used when the clods become wet and brittle by rain. "Kunte" is also used to break the clods and to level the ground. The work of levelling is done by a pair of bullocks four times over the same area of the Khariff soil and as many times as are necessary in the case of Rabi soil. Two, four, six and at times twelve

bullocks have to work in order to render the surface even. In case any hard clods escape the above operations, they are generally broken by wooden clubs. The ploughing is commenced in the month of February and the ploughed land allowed to remain untouched till the onset of monsoon in June when "kunte" is used to crush the clods.

Cleaning the field

Cleaning of the field is done by picking up the remnants of the previous crop like stubble, etc., and by using "kunte" in the case of red soils, to remove deep rooted weeds and grass. In some lands, root grasses called "nut" and "kurke" are common. The farmers have to dig and remove them to their very roots. They collect these grasses and burn them into ashes. The labour and cost of attending to the work of cleaning the fields are rather more in the case of black soils. Light works like picking the remnants are done by women and children.

Manuring

Manure is applied to soil, more or less, of evey description. The red soil, owing to its inferior quality, requires manuring every year. In the past, dry crops were seldom manured as all the available manure was used for paddy fields. There are two ways of obtaining the manure required for the fields or of manuring the lands. The manure obtained by the first method is popularly called mixed manure. It is prepared by putting stubble, ashes, dust, dung and urine of cattle, and all such kinds of rubbish into a pit of three to four feet deep, specially dug for the purpose, and allowing the whole thing to decompose. When the ploughing work is commenced, this manure is carried to the fields in carts, heaped and, later on, evenly spread over the field and then mixed with the soil by means of a harrow. The second method of manuring the fields is by quartering sheep and goats on the fields for a few days. The shepherds are paid often in kind and sometimes in cash. This method is followed for seven to ten days in different portions of the land. The dung and urine of sheep and goats serve as good manure. In places where black soils were found no manure was applied to fields, but those, who were well-to-do, manured their fields by quartering sheep and goats on their fields. Use of green manure and chemical fertilisers are now becoming popular. The farmers are recommended to treat the soil by applying the required dosage of chemical fertilisers by the time of preparing the soil. Accordingly, many of the farmers take up periodical application of chemical fertilisers as recommended by the Department.

Sowing

The seeds are sown, either by broadcasting or by the use of a drill, in lines. When the land is moist enough, the seeds are dibbled into the soil by hand. A seed drill worked by a man and a pair of bullocks can sow four to five acres a day in respect of Khariff crops, and three men and three pairs of bullocks can sow three acres of land in a day in the case of Rabi crops. In

some cases, sprouted seeds are sown and in case of crops like rice, seedlings are first raised and then they are transplanted. In respect of crops grown under irrigated conditions, ridges and furrows are formed in the fields and seeds are sown on the sides of the ridges by hand dibbling. Ordinarily 18 inches seed drills are used for sowing. Four acres, both of "Masab" and "Regada" grounds, can be sown with seeds by means of three men and six bullocks working the sowing implement steadily. Generally, sowing operations coincide with the outbreak of the monsoon. The farmers observe asterisms for determining the proper time of sowing the seeds. Sometimes, seeds are sown by dibbling behind the country plough. The seeds are dropped by hand uniformly in the plough furrow by women walking behind the plough. For purposes of sowing, the 'Tiphan' seed-drill is used. Seed drills with tines of 9 inches apart and 'Bukkha' of 2 inches apart from each tine are also used. This method is also followed in respect of crops like China-mung and Vyshaka-mung.

Interculturing

Interculturing is done to till or stir the soil in between the lines of the crop so as to remove weeds and prune the roots of the crop. Generally two or three hoes called the 'Kolpa' or Bullock hoe (kunte) are used with a pair of bullocks to remove weeds. Interculturing is done as many times as are necessary for the crop, depending upon the life and the habit of the growth of the crop. Care is taken not to stir the soil beyond two inches deep. Sometimes, interculturing is done by working with a small blade-harrow or sickle or 'dunti'. In respect of some crops, two hoeings and weedings are done to stir the soil and to remove weeds. The second hoeing is done one month after the first hoeing is completed.

Weeding

Intercultivation is essential for controlling weeds and loosening the soil. About two to three timely intercultivations are carried out during the life period of the crop. The first intercultivation is done with silt hoes. Weeds are ordinarily removed by interculturing, but some weeds escape the hoes and are to be removed by hand with the help of a weeding hook or sickle and this is generally done in respect of most of the crops. Weeding is also done with the help of the 'Khurpi' or hand-hoe. Harrowing is also done to remove weeds by working with the 'Bakhar' or blade-harrow with a pair of bullocks.

Earthing-up

Earthing-up means digging the soil from near about the plants by hand or a plough or a blade-harrow and heaping the earth up at the base of the plant. It is essential in order to give support to the plant and keep the roots under the soil. This operation is done in respect of crops like sugarcane, hybrid maize, etc., after a month from the date of sowing. Earthing-up also controls the insect-pest called stem-borer to a certain extent.

Top-dressing

Top-dressing consists in applying of quick-acting manures and fertilisers on the surface of the soil and then mixing it up with the soil. This method is followed when the crop begins a rapid growth. The period of top-dressing varies from crop to crop. Special dosage of fertilisers is recommended for mixing it up with the soil in respect of almost all the hybrid varieties. This kind of operation was not widely prevalent in the district until recently.

Watering the crop

Irrigation is done from wells, tanks and canals. Water is lifted from the wells and rivers by working with water-lifts such as motes, persian wheels or oil and electric pumps and taken to the fields in small field channels. Two or three men are employed in order to lift and regulate the supply of water to the fields. In the case of canals, water is mostly taken by gravitational flow.

Fields are flooded with water for certain crops. In respect of crops grown in rows, water is taken in furrows. Careful and restricted irrigation is followed in order to avoid heavy attack by pests. Irrigation is ordinarily based on the soil type and the nature of the crop grown. Irrigation before the sowing of seeds and again at the milking or ripening stage or tusselling time is of special importance. Generally, water is given once in a week in respect of red soils and once in 10 or 12 days in respect of black soils. In respect of paddy crop, water is allowed to remain at a level of 2 inches evenly in the field and is let out once in a month or so. The fields are allowed to dry up for two to three days and once again watered to a level of 2 inches or 5 cms.

Crop protection

The farmers take precautionary measures to control pests and diseases of crops by spraying or dusting special insecticides or fungicides as recommended by the Department of Agriculture. Special care is taken to treat the seeds before they are sown. It was found customary in the district to rub the cotton seeds with fresh cowdung and ashes by hand before they were sown. The process of spraying or dusting the crop against pests and diseases at regular intervals is continued during the entire period of the growth of plants. The plants are also protected against birds and cattle by keeping constant watch during the season. Local methods of bird-scaring consist in laying of a long rope just above the earhead of the crop from one corner to the other and shaking the rope at intervals. In some places, high platforms are erected from which stones are hurled by means of slings in order to scare the birds.

Harvesting and thrashing

Harvesting and thrashing is one of the most important agricultural operations, next only to ploughing and sowing. The crops are harvested or reaped when they are fully ripe. The period of ripening varies from crop to crop. Food crops like paddy, jowar, bajra, wheat and gram are harvested by cutting

the crop close to the ground with the help of a sickle. They are then tied in bundles and stacked in the field for some time to dry. Later on they are carried on to the thrashing ground where they are threshed either on a clean ground or on mats to separate the grain from the hay. Again, bullocks are made to trample on the stacks so that the remaining grains are separated. The grains are separated from chaff by winnowing against the breeze.

Pulses are mostly cut as a whole and are directly taken to the thrashing ground. The foliage is dried and used as fodder. The vegetables are picked by hand. Cotton is usually picked by hand, cleaned and sent to the market-yard. Root crops like groundnut, potato, etc., are harvested by digging or picking the plants from the ground. Sometimes, the pods are left in the ground and in such cases the fields are harrowed with a two-teeth or a blade harrow. The pods come upon the surface and then they are collected and dried on the thrashing floor.

Agricultural implements

The most common agricultural implements, both indigenous and the improved variety, are the wooden and iron ploughs, ridges bund formers, levellers and scrapers, sugarcane crushers and pans and jaggery making equipment. It was estimated that the district had about 1,00,000 ploughs, 230 sugarcane crushers, 130 oil engines, 185 tractors and about 80 *ghanas* in 1957-58 and the number of carts in the district was estimated at about 31,500. According to the 1961 census figures, the district had 1,19,380 wooden ploughs, 10,189 iron ploughs, 201 tractors, 525 electric pumps for irrigation purposes, 115 oil enginees and about 40 *ghanas*. Older types of agricultural implements are still found in many parts of the district in spite of the fact that some progress has been made in introducing modern improved implements. Several hand-tools are also in use for carrying on sundry agricultural operations. The indigenous ploughs are, however, giving place to iron ploughs. Tractor-drawn ploughs and disc-harrows are being gradually introduced in the ayacut area. Highly improved types of tractor-drawn implements are in use in some farms only. Recently, electric water-lifting pumps are replacing the oil engines. In Raichur district, the trend is towards mechanisation of agriculture.

Ploughs

The indigenous plough, made out of *jali* or *babul* wood, is still found in many parts of the district. The plough-share is made out of iron. The country plough in this district is almost of the same type as that found in other parts of the State except the fact that it is somewhat heavier and designed to be yoked to four pairs of bullocks. The heavier ploughs are needed to break the heavy black soils of the district. The light ploughs are yoked to a pair of bullocks, and are ordinarily used in red soils. These ploughs are designed in different sizes to suit different conditions. They open a triangular furrow. It is necessary to

plough the field several times. But they are not designed to vary the width or depth of the furrow. So, modern iron ploughs are introduced to overcome these two disadvantages. The country ploughs are simple and can be repaired by the village carpenter. In the case of iron ploughs, repair works are to be attended to by shops located at distant places of the district.

Seed drills

Seed drills are agricultural implements made for purposes of sowing seeds in straight lines in a field at uniform lengths. The furrows in which the seeds are deposited are opened by coulters. Three such coulters are fixed to a small log of wood. The seeds are allowed to pass through the hollow tubes into the soil. These tubes are connected to a single seed bowl at the top. It is usually drawn by a pair of bullocks. This implement is called the 'Tiphan' seed drill. This requires one man to drive the bullocks and another man to fill the bowl with seeds. Seed drills are light or heavy according to the season and the nature of the crop. For purposes of sowing cotton seeds, a seed drill called the 'Mogha' is generally used. This can easily be worked by a plough drawn by a pair of bullocks. A hollow perpendicular tube is attached to the plough by a thread and seeds are allowed to pass through the tube into the soil. This is operated upon by a man to drive the bullocks and a woman to fill the seed bowl with seeds. Seed drills of 18 inches are becoming popular. The seed-*cum*-fertiliser drill, presently introduced from Dharwar, is being improved upon and put to use in Sindhanur taluk as an experimental measure.

Harrows

In Raichur district, the common harrow in use is called 'Bakhar' or blade or dunti harrow. It is used to break the clods and bring the field to the proper condition of tilth to receive the seed. The blade harrow or 'Bakhar' consists of a mild steel blade of varying width and thickness fitted to a frame. Sometimes, it is used to remove weeds also. It is drawn by three to four pairs of bullocks and the number of bullocks may vary according to the nature of the soil. Two to six bullocks are yoked to the plough in order to render the hard soil smooth and even. When drawn by bullocks, the blade works at an angle resulting in stirring of the soil over the whole length of the blade. The depth of penetration could be varied by tying the harrow near or far from the yoke. It consists of a steel blade of about 2 inches to 5 inches in length and 3 inches in width. It can cultivate the land to a depth of 3½ inches to 4 inches.

Hoes

The hoe is a miniature blade-harrow. It is used for interculturing of crops like jowar, bajra and other foodgrains. In Raichur, the 'Kolpa' or bullock hoe is popular. It is used to remove weeds in between the lines of crops, to stir the soil and to conserve moisture. It has a light steel frame fitted to a log of wood at an angle. It is worked with a pair of bullocks by a

man. Ordinarily, hoeing is done two to three times during the plant growth.

Besides the agricultural implements worked with the help of bullocks or power, there are a few more tools worked by hand, namely, axe, pick-axe, spade, weeding hook, sickle, etc. The bullock cart is still the common means of transport. Most of the interculturing is done by means of a weeding hook called 'khurpe'. Sprayers, capable of spraying 20 acres or more, mounted on a bullock cart, have been recently introduced.

Farm mechanisation

Farm mechanisation requires heavy initial capital investment and skilled labour. The district is lacking in adequate bullock power. To make up this deficiency and to popularise the scheme of mechanisation of agriculture, farmers are being persuaded to purchase tractors. The Tungabhadra Project Board was advancing tractor-purchase loans to the ayacutdars from 1960-61 to the end of 1967-68. The amount of loans thus advanced by the Board during the period was as noted below :—

Year	*Rs.*
1960-61	66,000
1961-62	86,000
1962-63	1,35,000
1963-64	1,85,000
1964-65	1,53,000
1965-66	4,46,500
1966-67	12,94,000
1967-68	2,41,000

Some of the progressive farmers purchased tractors out of their own resources and a few farmers obtained loans from the scheduled banks for the purpose. The Agro-Industries Corporation has been supplying tractors on hire-purchase system to the farmers. To speed up the land development work in the ayacut area, the Government thought of establishing tractor service units in the ayacut taluks. Under this scheme, two Co-operative Land Development Societies have come into existence. As a result of all these measures, the number of tractors in the district has been enormously increasing. According to the figures supplied by the Deputy Director of Agriculture, Raichur, the number of tractors existing in different taluks of the district in 1968 was as given below :—

Sl. No.	Name of taluk			No. of tractors
1.	Deodurg	..	..	10
2.	Kushtagi	..	..	1
3.	Koppal	..	..	38
4.	Lingsugur	..	..	16
5.	Gangavati	..	..	76
6.	Manvi	..	..	118
7.	Raichur	..	..	105
8.	Sindhanur	..	..	74
9.	Yelburga	..	..	11
		Total	..	458
	Additional tractors purchased during 1969			97
		Grand Total		555

Thus, Raichur is one of the few districts in the State which possesses such a large number of tractors. The tractors are distributed mostly among the five ayacut taluks of the district where land development work is in progress. Among the taluks of the district, Manvi has the largest number of tractors and it is said that even among the taluks of the State as a whole, where tractors are largely used to carry on agricultural operations, Manvi taluk possesses the largest number of tractors. The total number of tractors in the district at present (1969) is 555. The total area ploughed by these tractors during the year 1968-69 was 79,000 acres.

Sindhanur Land Development Co-operative Society

The Sindhanur Land Development Co-operative Society was established in the year 1967 with a total share capital of Rs. 5,77,700. The Mysore Government has contributed a sum of Rs. 5,00,000 towards the share capital and another Rs. 50,000 for the construction of a workshop. The National Co-operative Development Corporation has also subscribed a sum of Rs. 50,000 towards the share capital of the Society, besides sanctioning a loan of Rs. 40,000 and a subsidy of Rs. 55,000. The Mysore State Agro-Industries Corporation, Bangalore, has also given a loan amounting to Rs. 64,504-90 to the Society. The assistance thus received is to be utilised for the establishment of the workshop.

The Society owns twenty-two tractors of different makes, *viz.*, six Massey-Ferguson, ten Escorts, five Mackormic International and one Hindustan. The capacity of these tractors varies from 32.5 H.P. to 50 H.P. In addition to these tractors, the Society possesses also a number of agricultural implements required for

different agricultural operations. The tractors and other agricultural implements are being made available to the farmers on hire basis as detailed below :—

Sl. No.	*Operations*			*Rates per hour of work.*
				Rs. P.
1.	Ploughing	..	..	15—00
2.	Levelling	..	..	14—00
3.	Tilling	..	..	12—00
4.	Sowing	..	..	10—50
5.	Harrowing	..	..	10—50
6.	Puddling	..	..	25—00
7.	Mileage	..	..	0—50 (per running mile)

Any farmer in the district can get these implements on the rates noted above, though preference is ordinarily given to the members of the Society. The work turned out by these tractors during 1967-68 and 1968-69 was as under :—

Sl. No.	*Type of work*		1967-68	1968-69
			(In acres and guntas)	
1.	Levelling	..	292-28	597-20
2.	Ploughing	..	1,359-21	2,231-18
3.	Tilling	..	566-30	1,044-05
4.	Sowing	..	162-00	248-00
5.	Puddling	..	56-10	137-38
6.	Harrowing	..	..	72-00

It is proposed to establish a workshop at Sindhanur for repair work of tractors and agricultural implements, in view of the financial assistance given by the State Government and the National Co-operative Development Corporation.

Land Development Co-operative Society, Manvi

The Land Development Co-operative Society, Manvi, was established in 1967 with a share capital of Rs. 6,58,900. It has 19 tractors and 46 different kinds of agricultural implements. The tractors are of different makes and of varying capacities, *viz.*, ten Escorts—37, four Massey-Ferguson, four Mackormic International and one Hindustan. The capacities of these tractors also vary from 32.5 H.P. to 50.00 H.P. These tractors and

other agricultural implements are hired out to agriculturists on the following rates :—

For 32.5 H.P. tractors :

		Rs.
(a) Levelling	..	15 per hour
(b) Tilling	..	15 ,,
(c) Ploughing	..	15 ,,
(d) Disc-harrowing	..	15 ,,
(e) Paddy puddling	..	25 ,,
(f) Sowing	..	15 ,,
(g) Local-kunte	..	15 ,,
(h) Maize sheller	..	17 ,,

For 50 H.P. tractors :

(a) Levelling	..	25 per hour
(b) Tilling	..	15 ,,
(c) Ploughing	..	25 ,,

Except in a few cases, the Society has almost prescribed a uniform rate for all operations. The work turned out by these tractors during 1968 and 1969 was as under :—

Sl. No.	Work turned out		1968	1969
(1)	Levelling under A.R.C	..	416 acres	916 acres
(2)	Levelling in general	..	130 ,,	15 ,,
(3)	Tilling	..	437 ,,	273 ,,
(4)	Ploughing	..	374 ,,	270 ,,
(5)	Sowing	..	213 ,,	250 ,,
(6)	Paddy puddling	..	..	101 ,,
(7)	Disc-harrowing	..	..	40 ,,
(8)	Maize sheller	..	..	95 hours

The major item of work turned out by the Society during 1968 and 1969 was the levelling of land taken up under a scheme sanctioned by the Agricultural Refinance Corporation. During the year 1969, the Society earned a sum of Rs. 2,40,000 in the form of hire charges as against Rs. 1,14,796 in 1967-68. The Agro-Industries Corporation has agreed to supply four more tractors to the Society on hire-purchase system. It is proposed to establish a repair/service centre and a custom service centre, for repairs of Society tractors and other agricultural implements under a composite scheme. For this purpose, the Society will get financial

assistance to a tune of Rs. 1,60,000 towards the purchase of machinery, equipment, tools, etc., construction of workshop and work-sheds, margin money for securing bank accommodation or working capital and construction of sheds for tractors, and another sum of Rs. 90,000 as subsidy towards the construction of work-sheds, managerial cost, construction of sheds for tractors and subsidy for tractor operators. In addition to the above, the Government have sanctioned an amount of Rs. 50,000 as share capital for taking up the construction of workshop and to purchase the required machinery. Two American Peace Corps volunteers and a German volunteer are, at present, assisting the Society in the proper maintenance of tractors, etc.

Tractor-owners' Association

The spate of tractors in the district has brought in its wake several problems, mostly pertaining to the easy availability of spare parts and technical personnel to repair them, which cannot be solved by any individual member acting in his own individual capacity. In order to solve such problems encountered by the tractor owners of the district and to meet the increasing demand for tractors, an organisation has been formed to bring together all the tractor owners, Government officials concerned, dealers and manufacturers on a single platform. Tractor owners from all over the four districts of the Gulbarga Division attend these meetings. As a result of their efforts, dealers in tractors have opened a service/repair centre at Sindhanur and the manufacturers have instituted a phased training programme for the benefit of tractor owners and operators. In 1968-69 a tractor owners' convention was held at Manvi which was attended by more than 300 delegates from all the four districts of the Gulbarga Division.

Departmental tractors

The tractors, bulldozers and other agricultural implements of the Department of Agriculture are placed under the control of an Agricultural Engineer who is stationed at Sindhanur and they are made available to farmers on a hire-basis. The Department is maintaining in all, twelve Massey-Ferguson tractors, eighteen Zettor tractors and one Escort tractor, two D-7 bulldozers, one C-100 bulldozer and two DT-54 bulldozers along with twelve trailers and two lorries. These agricultural implements and other machinery are hired out to the cultivators at the following rates :

Tractors

		Rs. P.
(1) Levelling (0.1%)	..	153.00 per acre
(2) Levelling (1.2%)	..	221.00 ,,
(3) Ploughing	..	25.00 ,,
(4) Tilling	..	12.00 ,,
(5) Puddling	..	35.50 ,,
(6) Disc-harrowing	..	12.00 ,,
(7) Ridging	..	12.00 ,,
(8) Mileage	..	0.50 per mile
(9) Transportation of manure in the trailer.	..	0.85 per mile

Bulldozers		Rs. P.
(1) D-7 bulldozer	..	40.00 per hour
(2) C-100 ,,	..	45.00 ,,
(3) DT-54 ,,	..	35.50 ,,

Unlike the hire charges levied by the two Societies for the use of their tractors by the cultivators, the Department is hiring them on a more concessional basis. The physical progress achieved by these departmental tractors and bulldozers in 1967-68 and 1968-69 was as under :—

Sl. No.	*Work turned out*		1967-68	1968-69
1.	Levelling	..	626--02 acres	566 34 acres
2.	Ploughing	..	1,658- 27 ,,	2,265- 24 ,,
3.	Tilling	..	435- 20 ,,	581—12 ,,
4.	Disc harrowing	..	64—00 ,,	101—00 ,,
5.	Ridging	..	31- 00 ,,	9--00 ,,
6.	Puddling	..	6—00 ,,	20 29 ,,
7.	Seed drilling	..	..	1—00 ,,
8.	Bulldozers	..	0,256--30 hours	1,948 - 30 hours

The major items of work turned out by the departmental tractors are ploughing and levelling. In addition to the above, the Department is equipped with 122 types of agricultural implements, like ridgers, cage wheels, multipurpose blades, mould-board ploughs, disc ploughs, tillers, paddy disc harrows, maize shellers, grain thrashers, low volume sprayers, seed planters, etc. They are made available to the farmers along with the tractors. The Department conducts demonstrations to impart the technical know-how about the machinery to the farmers. Six tractor operators' training courses were conducted during 1968-69 and 106 candidates received training in operating the tractors.

A separate scheme for popularisation of improved agricultural implements is in operation in the district since April 1963. The main aim of the scheme is to popularise the use of improved agricultural implements in rural areas by educating the farmers, through series of demonstrations, in the technical know-how. Under this scheme, five scrapers, two bund formers, twenty-five ridgers, two paddy puddlers, three Jagath ridgers, fifteen paddy weeders and ten seed treating tubes—in all 62 implements—have been distributed among the farmers, at 25 per cent subsidised rates. Sprayers and dusters of improved varieties are also supplied to farmers at 50 per cent subsidised rates. It is proposed to distribute 500 sprayers and 90 dusters in all the taluks of the

district. The Agro-Industries Corporation has so far supplied 61 tractors on hire-purchase system. The scheduled banks have advanced loans for the purchase of 63 tractors. The agricultural implements like Gurjar plough, puddler, Mysore bar point plough, etc., are being supplied by the Department at 25 per cent subsidised rates.

Improved seeds

Efforts have been made by the Department of Agriculture to introduce improved varieties of seeds all over the district. A medium-grained long duration strain of paddy known as NR-35 had been selected from an indigenous variety and being distributed in large quantities. Khariff jowar of an improved variety (D-340) had been released from the Tungabhadra Agricultural Development Centre, Dhadesugur. It is a selection from the local variety particularly suited for light irrigation. The grain is white and the stem is juicy. An erect variety of groundnut, TMV-2, can be grown both in Khariff and the Rabi seasons. It has been found to fare well. The most common varieties of cotton grown in this district are the Lakshmi and the Jayadhar varieties. The popular variety of sugarcane from Coimbatore, CO-419, is grown in Raichur district. Another variety, CO-467, has also been found to yield a good quality of cane and is now being tried on the demonstration plots. Different methods of obtaining seeds are adopted by the cultivators of Raichur district. Some progressive farmers preserve the seeds of healthy and vigorous plants till the time of next sowing. In some cases, seeds are obtained from societies and progressive farmers who grow their own seeds and have a surplus to sell. Improved strains of high-yielding varieties are also obtained from the different seed farms located in the district.

Use of good seeds is most essential for increasing crop yield. Good seed is defined as one which is pure, viable and also of the improved variety recommended for a particular tract. The improved variety is developed by bringing about botanical improvement by adopting various methods of plant breeding such as introduction from outside, selection from the available material, hybridisation and the like. As soon as the plant breeder finds out a promising variety or varieties, large-scale trials are conducted to test them at least for three years in the Research Station where they are developed. When they show a better performance than the existing varieties, they are released for district trials on the fields of cultivators in various tracts to decide the area to which the seeds are particularly suited. That variety of seed, which goes through these scientific trials successfully, becomes the recommended variety. It is released for general cultivation and steps are taken to multiply the seeds of such tested varieties on a bigger scale. It is neither practicable nor feasible to multiply the seeds of recommended varieties only through Government agencies, but at the same time it is necessary to multiply the seeds

in early stages on the departmental farms and at later stages on the farmers' fields. While the stages in the multiplication of seeds vary from crop to crop, multiplication of seeds of food crops like jowar, paddy, wheat, gram, etc., is done in three stages, *viz.*, (1) *Nucleus Seed*: This seed is produced in the Research Stations by the plant breeder himself; (2) *Foundation Seed*: Nucleus seed is multiplied in the departmental seed farms; and (3) *Registered Seed*: The foundation seed is multiplied on the fields of seed growers under the close supervision of the extension staff. In order to provide good seed, the State Government has decided to produce sufficient quantity of registered seeds of recommended variety of important food crops so as to cover 25 per cent of the total area under the crop. As a measure to achieve this object fully, a Central State Farm is located in this district.

The Director of Agriculture, in consultation with the research experts and the regional committee, has to decide on the particular strain of seeds to be used in a particular area. The nucleus seed in respect of the approved strain is supplied by the Agricultural Research Station to the government seed multiplication farms for multiplication. This foundation seed is supplied to the registered seed-growers only and not to cultivators direct. A registered seed-grower is a private cultivator who has entered into an agreement to sow his land with the foundation seed supplied by the seed multiplication farm exclusively and to cultivate the land under the supervision of the officers of the Agricultural Department to the requisite standard. He will ordinarily be under an obligation to sell the crop, if so required by the Agricultural Department, to the cultivators selected by the Department on terms mentioned in the agreement. The registered seed-grower should normally be a progressive farmer who is willing to sow a minimum of two and a maximum of five acres of his land with the foundation seed.

The seed-growers are registered by the Deputy Director of Agriculture of the district in consultation with the Extension Officers in the community development areas and village level workers. The village level workers are held responsible to see that the registered seed-growers, who have drawn the seed supply, really sow their lands with the seeds as agreed upon. The village-level workers and the Agricultural Extension Officers have to visit the fields of the registered seed-growers at periodical intervals to see that the cultivation is being carried on properly. The Assistant Director of Agriculture, whose office is located at Sindhanur, co-ordinates the work of these officers.

Seed Farms

There are four seed multiplication farms in Raichur disrict. The main object of these seed farms is to multiply and produce improved foundation seeds of the tract so as to cover a large area under improved varieties of crop and obtain better results.

The following are the seeds that are being multiplied in these seed farms: Paddy, D-340 Jowar, M-35-1 Jowar, Groundnut TMV-2, Assiriya Mwitunde Groundnut, NPH-1 Castor, HK-289 Navane, K-221-1 Navane. K-28 Wheat, Lermarojo, Chotolilerma, Safedlerma, Tur C-28, Ragi, Castor, Hampi Cotton and Lakshmi Cotton.

The Seed Multiplication Farm, Gangavati, was established in 1958 with an area of 62 acres and 7 guntas. Originally, this farm was intended for demonstration purposes. Now it is a multipurpose farm for demonstration purposes, seed multiplication, sugarcane breeding and agronomical trials conducted by the Indian Council of Agricultural Research. It has been converted into a medium Research Station. The Seed Multiplication Farm, Dhadesugur, in Sindhanur taluk, was established in 1958 with an area of 41 acres and 12 guntas. The Seed Farm at Guladhalli, in Koppal taluk, was established in 1969 with an area of 57 acres and four guntas. During the same year, another seed farm was established at Turkondona with an area of 83 acres and 33 guntas. The main agricultural farm of the district for rainfed cultivation is situated near Raichur town. This farm has been in existence for the last 35 years and has been a centre of dry farming activities in the district. The farm consists of a number of research sections carrying on research on various aspects of agriculture. This farm will be dealt with under Agricultural Research Station, Raichur.

The quantity of improved seeds produced in these seed farms from 1961-62 to 1965-66 was as detailed below:—

Sl. No.	*Name of seed*		1961-62	1962-63	1903-64	1964-65	1965-66
				(In kilograms)			
1.	K. Jowar D-340	..	N.A.	6.876	3,545,	6,000	6,040
2.	Groundnut TMV-2	..	1,000	1,727	1,880	765	4,000
3.	Sateria	.	2,000	174	1,350	3,300	..
4.	Tur C-28	..	100	260	35	..	1,500
5.	Paddy HR-35	..	7,500	12,508	2,435	7,500	8,035
6.	R. Jowar M-35-1	..	1,875	1,909	85	3,575	8,300
7.	Wheat K-28	..	560	863	145	1,200	2,015
8.	Gramochaffa	..	800	884	120	..	915
9.	Cotton	..	1,180	1,251	110	1,400	..
10.	Dhancha	..	..	181	..	..	..
11.	Paddy HR-19	..	900	1,220	..	..	1,180
12.	Paddy DP-17	..	600	410	..	..	..
13.	Paddy Italian	..	..	355	..	..	.
14.	Paddy DP-33	..	..	27	..	..	..
15.	Safflower	..	..	443	..	..	..
16.	Castor	..	..	25	..	..	..
17.	Sugarcane	..	..	50,000	..	..	..
18.	R. Jowar	..	..	..	..	710	..

Central State Farm

The Central State Farm is situated on either side of the distributary No. 54 of the Left Bank Canal of the Tungabhadra, about 54 miles from Raichur, at a distance of six kilometres from the main road of Raichur-Sindhanur. near Jawalgera village of Sindhanur taluk. It has an area of 7,569 acres. The Farm has begun its work from the year 1969. The main objectives of the Farm are (1) to produce and multiply high-yielding varieties of wheat, cotton, hybrid jowar, hybrid maize, hybrid bajra, materia, ragi and other cereals and legumes like soyabeans, grams, etc., to meet the increased requirements of seeds of high-yielding varieties in the IV Plan period ; (2) to serve as a demonstration farm in the Tungabhadra Project area so that farmers can understand the benefits of irrigation, fertilisers, seeds of high-yielding crops, use of agricultural machinery, etc ; (3) to provide facilities for repairs and maintenance of agricultural implements, machines and other equipments ; (4) to provide trained personnel to other farms in the use of agricultural machinery ; and (5) to provide gainful employment to the people. A General Manager (at present called Director) is in charge of the Farm. He is assisted by a Mechanical Engineer, an Irrigation Engineer, a Deputy Director and an Administrative Officer.

The Soviet Union Government has given agricultural machinery worth about 51 lakhs of rupees to this farm. The machinery supplied includes bulldozers, different kinds of tractors, caterpillars, graders, scrapers, harvesters, cotton planters, etc., besides agricultural implements like ploughs, disc harrows, seed drills, fertiliser distributors, etc. This farm, when fully developed, will produce about 1,00,000 quintals of seeds of different high yielding varieties. At present, the farm work is in its initial stages.

Seed Processing Unit, Sindhanur

There is a Seed Processing Unit at Sindhanur established in 1956. The main purpose of starting this unit was to process and certify the hybrid seeds produced in Gulbarga Division. It is placed under the control of an Assistant Director of Agriculture with the required staff to assist him. It is a fairly well-equipped unit. It possesses a grain thrasher with a capacity of threshing three quintals per hour, two seed cleaners, two seed treaters, one maize sheller and one crop sprayer. Seeds of crops like Mexican wheat, paddy, soyabean, etc., are cleaned, processed and certified. Provision has also been made to store the processed seeds, which are unsold in the warehouse at Raichur. In 1967-68, a total quantity of 575.63 quintals of hybrid jowar, 117.18 quintals of hybrid bajra and 489.73½ quintals of hybrid maize was stored in the warehouse. The total income derived by processing the seeds was Rs. 31,811-30 in 1968-69 as against Rs. 13,159-74 in 1966-67. The unit also provides loans called "Q" loans and advances to the cultivators for the purchase of processed seeds. In 1967-68, the total

advances made by this unit was of the order of Rs. 5,68,876-50 as against Rs. 5,40,990 in 1966-67.

Seed treatment for paddy, Khariff jowar, Rabi jowar, cotton, groundnut, etc., is being done on a campaign basis before they are allowed to be sown. Agrosan G. N., Seed Tox, Captan, etc., are commonly employed for seed treatment.

The Tungabhadra Agricultural Development Centre, Dhadesugur, is also multiplying improved strains of seeds such as D-340 jowar, Taichung Native-1 and I.R-8 paddy, TMV-2 groundnut and castor seeds and is also producing parent seed materials for the production of hybrid jowar and hybrid bajra.

Increasing of soil fertility

The standing crops take away much of the fertility of the soil for their growth and drain the soil of nutrients which ultimately reflect on lower yields even from a very fertile soil. Careful maintenance of soil nutrients in the earth is thus a most important factor for obtaining good yields. In addition to the crops removing the plant food, the soil loses its plant food in several other ways also; hence the need for manuring. Soil exhaustion can be avoided by a judicious rotation of crops, fallowing and by regular and adequate manuring, especially with organic manures.

Rotation of crops

Rotation of crops is growing a number of crops in a regular sequence on the same piece of land during a specified period. It helps to enrich the soil, maintain plant food, curb the growth of weeds and parasites, minimise soil erosion and conserve moisture. For inclusion in a rotation, crops should be carefully selected. Crops which enrich the soil, like legumes and green manures, are included in rotation. This method of rotating the crop has been traditionally practised in the district. Groundnut is rotated with Khariff jowar or cotton. Glyricidia, a green manure plant, is grown in the district as it gives to the soil more nitrogen than it absorbs from the soil for its growth by way of bacterial nodules. Cotton is rotated with jowar in heavy soils and with bajra in light soils. But the rotation is modified according to the district's seasonal conditions and the nature of the field. Pulses are valuable as rotation crops in dry and irrigated lands, as they are restorative of plant food like other leguminous crops.

The raiyats are well aware that the cultivation of cotton is more profitable than jowar, but they are obliged to observe the rotation of crops to ensure their productiveness. The judicious alteration of cotton, jowar, gram and such other crops, contributes to the fertility of the soil and mutual productiveness of the different crops.

As per the results of research work, cultivation of jowar, groundnut and cotton by rotation is found to be more economical. Rabi jowar is rotated with cotton or groundnut or wheat.

Taking a leguminous crop like groundnut or gram in two or three years' rotation helps in increasing the yield of the succeeding crop.

Fallowing

Allowing the field to remain without any crop for a season or more between successive crops is generally called fallowing. Land may be allowed to remain fallow without cultivation or after first cultivation. Growing of green manure crops amounts to allowing the field to remain fallow. It helps to maintain soil fertility. In Raichur district, large tracts of land were allowed to remain fallow as current fallows for a few years. The area under current fallows in 1966-67 was 88,848 acres.

Mixed crops

Two or more crops are grown together on the same piece of land during the same period. This has been practised mostly in rain-fed areas of the district. It helps to keep up nitrogen in the soil. This practice is followed as a safeguard against the total failure of crops. The mixed crops naturally increase the plant food in the soil that is necessary for the growth of the main crop. In Raichur district, *togare* or tur is grown almost with dry land cereals like ragi, jola and sajje. This practice is still in existence in the district. Castor, niger, lab-lab and jowar are some of the crops grown as mixed crops, but harvested at different periods. Groundnut, in rain-fed areas, is grown with redgram.

Manures

Plants require several elements for their good growth and high productivity. Of these, nitrogen, phosphorous and potassium are the most important and are generally found deficient in soils. Ordinarily, these three elements are supplied by manuring. Green manure, farmyard manure, compost and chemical manure are some of the types of manures available to the farmer in the district. It has been a practice with the cultivators to use mixed-manure and to quarter sheep and goats in the fields for several days. Green manure crops like sunnhemp, dhaincha, sesbania and pillipesera are also grown. The cultivation of glyricidia, as a good green manure crop, has been found profitable. The scope for development of compost-making in the old Hyderabad Karnatak area was very large. Adequate grants were provided for the continuation of the scheme by extending loans to municipalities for the intensification of compost production. The entire amount required for this scheme was obtained as a loan from the centre. The progress in the district regarding manufacture and distribution of urban compost was well maintained and a sum of Rs. 1,225 was spent for this purpose in 1958-59.

Development of local manurial resources and large and better utilisation of local resources for production of manure in rural areas was a notable feature of the 'grow more food' campaign. There were three main items coming under this scheme. The first item was the preparation of compost out of cattle and

agricultural waste in the rural areas. The scheme envisaged the training of village leaders in the methods of conservation of waste and preparation of compost. This work was proposed to be started in 85 National Extension Service Blocks in the whole State. Actually, the district of Raichur got the benefit in five blocks. The next item in the programme was the utilisation of village wastes and night soil for compost making. This work was entrusted in bigger villages to panchayats. Each panchayat was given an initial loan of Rs. 2,000 for this purpose. The panchayats were mainly responsible for utilisation of all waste and night soil under technical supervision. In the smaller panchayats, this work was entrusted to a scavenger, who would have to conserve and prepare compost from night soil. The cost of maintaining one scavenger was estimated to be about Rs. 500 per annum.

A separate scheme has been taken up in the district since April 1961 with the main object of intensifying the rural and urban compost production and preparation of night soil composts. It is also proposed to increase the area under green manure crops. Cow-dung manure is also being popularised. In 1968-69, nearly 12,500 urban compost and 2,41,120 rural compost pits were prepared. Green manure seeds of glyricidia, sunnhemp, dhaincha, sesbania, pillipesera were supplied to the tune of 560.55 quintals and 260 compost pits of green manure leaves were prepared. Seedlings or cuttings of green manure plants were distributed. In all, green manure crops were grown in about 9,000 acres. Glyricidia green manure plants are sown on bunds, waste lands, etc. During the Third Five-Year Plan, 17,000 tons of urban compost and 2,77,000 tons of rural compost were prepared. Green manure crops were grown in 8,000 acres. The financial outlay for this scheme was Rs. 1,16,000. The following table shows the details of urban and rural compost pits prepared in the district from 1961-62 to 1965-66 :—

Particulars	1961-62	1962-63	1963-64	1964-65	1965-66
Urban Compost pits	5,200	10,615	9,875	5,865	8,870
Rural Compost pits	8,300	..	18,438	75,826	89,936

Fertilisers

Distribution of fertilisers to grow more food crops is one of the basic policies of the Agricultural Department. Out of about 75,000 tons of fertilisers to be procured for the entire State in 1959-60, 50,000 tons were actually distributed. The share of Raichur district in the scheme of distribution came to 2,360 tons. A margin of Rs. 30 per ton was allowed between the procurement price and the maximum retail price in respect of ammonium sulphate. This amount would not be sufficient to cover transport

and other charges in respect of certain taluk headquarters and other distribution centres which were far away from the railhead. In such cases, subsidies were given to meet the transportation charges.

It has been proved that the use of fertilisers for rainfed crops helps to develop the root system and thus makes it resistant to drought conditions. Compound and complex fertilisers are recommended for use in the district by the Agriculture Department. Chemical compounds are used as soil insecticides, seed treating chemicals, weed killers, etc. An experiment to explore the possibilities of replacement of farm-yard manure and cake partially or fully by inorganic fertilisers was conducted for a period of three years from 1960-61 to 1962-63. The results of this experiment consistently indicated that farm-yard manure and cake could be wholly replaced by inorganic fertilisers.

The Marketing Co-operative Societies in the district have taken up the work of distribution of fertilisers among the farmers. The total value of fertilisers distributed by the Marketing Societies and Primary Land Development Banks was Rs. 97.77 lakhs in 1968-69 as against Rs. 145.07 lakhs in 1967-68 and Rs. 90.5 lakhs in 1966-67. Further, they supplied improved seeds worth about Rs. 3.34 lakhs in 1967-68 and Rs. 3.63 lakhs in 1968-69 (upto end of 31st March 1969). They had also supplied insecticides worth Rs. 3.91 lakhs in 1967-68 and Rs. 2.70 lakhs in 1968-69. The following table shows the year-wise distribution of fertilisers in the district from 1965-66 to 1968-69 :—

Statement showing the distribution of fertilisers (in tons) in Raichur district from 1965-66 to 1968-69

Sl. No.	Name of fertiliser	1965–66	1966–67	1967–68			1968–69		
				Through co-operative societies	*Through other agencies*	*Total*	*Through co-operative societies*	*Through other agencies*	*Total*
1	2	3	4	5	6	7	8	9	10
1.	Ammonium Sulphate ..	3,869	7,172	6,473	1,920	8,393	7,948	2,855	10,803
2.	Urea ..	970	6,262	4,055	3,080	7,145	4,913	6,229	11,142
3.	A.S.N. ..	2,567	1,097	689	100	789	270	200	470
4.	C.A.N. ..	217	574	160	320	480	852	163	955
5.	Ammonium Phosphate ..	..	2,044	913	1,230	2,143	1,217	5,081	6,298
6.	Diammonium ..	..	..	411	81	491	1,236	54	1,290
7.	Ammonium Chloride ..	..	..	547	..	547	145	..	145
8.	M.O. Potash ..	..	..	620	..	620	371	1,382	1,753
9.	Superphosphate ..	4,676	5,753	..	5,860	5,860	..	11,363	11,363

The foregoing table reveals that the supply of fertilisers has registered a considerable increase during recent years. The awareness, on the part of the farmers, of the benefits of the use of fertilisers and the recommended package of practices and the Intensive Agricultural District Programme recently introduced in the district have increased the demand for fertilisers. In addition to the supplies of fertilisers by the Department, four private companies are also in the field. They are taking up demonstration plots on the fields of the farmers and popularising their products.

Plant protection

It is natural that the standing crops are ordinarily exposed to several types of diseases and pests. The plant protection programme includes seed treatment, anti-rat campaign, control of soil and polyphagous pests, intensive plant protection measures, chemical weed control, etc. Seed treatment for paddy, khariff jowar, rabi jowar, cotton, groundnut, etc., is being done on a campaign basis before the sowing season. Chemicals like Agrosan G.N., Seed Tox, Captan, etc., are used for this purpose. There is a well organised campaign against rats. Chemicals like Zinc Phosphide, Ratafin, etc., are used for this purpose. Soil and polyphagous pests, including white ants, root grubs and root aphids and pests attacking more than one crop like army-worm, red-headed hairy caterpillar, Deccan wingless grasshopper, etc., are controlled by using chemicals like B.H.C. 10 per cent, Lindane, Heptachlor, Chlordane, Aldrin, Diadrin, Malathion, 50 per cent E.C., etc. Intensive plant protection measures are also taken up under high-yielding variety crops, including mass spraying. The broad-leafed weeds in paddy fields and striga in jowar fields are controlled by the use of 2 or 4-D weed killer, etc. The following are some of the diseases and pests commonly found in the district in respect of some of the important crops.

Diseases and pests

Grain-smut (*Sphacelotheca sorghi*) is the most widely prevalent and destructive disease affecting the jowar crop. It is popularly known as *kadiga roga*. It is caused by the fungus *Sphacelotheca sorghi* which affects the ovaries. The loss due to this infection is sometimes 20 to 25 per cent of the crop. The disease can be diagnosed only when the earheads develop. Individual grains here and there on the earhead are converted into elongated white bodies which later turn grey in colour. These bodies are the sacs, filled with black dusty powder, which are the spores of the fungus. In severe cases of infection, all or most of the grains in the earhead will be affected. The infection takes place between the time of germination and the sprouting of the seedlings and cannot be made out until the plant develops earheads. The ideal treatment for this disease is sulphur dusting. These seeds should also be dusted with sulphur before sowing.

Loose-smut (*Sphacelotheca cruenta*) is another disease which affects jowar and which is often confused with the grain smut. But the species of the fungus causing the disease is different. The infected ears are somewhat looser than the healthy ones. Infection is observed on all the spikelets. The treatment of the seed before sowing with Sulphur dust, Ceresan, Agrosan, Arasan or Fermate controls the disease.

Head-smut is another disease which affects jowar. In this case, the whole earhead is affected. This is also a fungus disease. The membrane ruptures and exposes the black spores in mass which are easily disseminated by wind and other agencies. The fungus sometimes infects also the leaves surrounding the smutted earheads. All the infected plants should be removed completely as soon as the infection is noticed. Jowar should not be cultivated for a few years in fields severely infected with this disease.

Rust (Puccinia purpurea) is a very common disease affecting jowar, caused by the fungus *Puccinia purpurea*. Numerous small, bright and purplish-red spots appear on the leaves of the plant affected by this disease. The infection usually takes place on grown-up crops and increases as the crop reaches maturity. Lower and older leaves of the plant are severely affected Cultivation of jowar successively year after year on the same field keeps the fungus alive. In severe cases of infection, rotation of crops should be practised.

Cotton diseases

Wilt disease is the most destructive disease affecting cotton and is caused by the fungus *Fusarium vacinifectum*. The disease is rampant in black cotton soils. Infection is observed in plants, seven to twenty days old, in patches which go on extending in the field. Symptoms become apparent when the plants are five to six weeks old. The lower leaves turn yellow, wilt and wither. The upper leaves also get rotten, leaving the stalks bare. The fungus plugs the water conducting vessels of the roots and stems and cuts off the supply of water to the plant. A brown or black discolouration can be clearly seen in the water-conducting vessels. The disease cannot be effectively controlled except by pulling out all the infected plants and destroying them. It is recommended to treat the seeds with Ceresan as a preventive measure.

Black-arm is also a serious disease affecting cotton crop and is caused by bacteria. The leaves, petioles, stems, twigs and bolls of the plant are affected by this disease. Plants with poor growth in drought areas or in poor soil suffer most. Small and irregular water-soaked spots appear thickly scattered on the lower surface of the leaves and bolls. When the infection extends to the stems and twigs, it is known as black-arm disease. At this stage, black patches of varying sizes appear. The familiar

treatment to ward off this disease is to treat the seeds with three grams of Ceresan per kilogram as a preventive measure before they are sown.

Root-rot is a fungus disease which affects cotton. This is chiefly a seedling disease. Mature plants are also sometimes attacked. Soft yellow patches are noticed on the tender stems of the seedlings at the ground level. The patches later turn black and the seedlings collapse. Grown-up plants affected by this disease dry up and wither. The best way to control the disease is to practise rotation with non-susceptible crops.

Red-leaf blight is a physiological disease occurring on weak plants in poor and deficient soils. The leaves turn red, reddish brown or yellow and wither prematurely. The yield and the quality of lint are reduced to a great extent. Sulphur dusting is a popular remedy for this disease.

Groundnut diseases

Leaf spot is a major disease of the groundnut crop prevalent all over the district. This is a fungus disease which usually affects plants when they are one to two months old. The lower leaves are first attacked. The spots are brown to black in colour, nearly circular in shape, usually two to four millimetres in diameter and surrounded by a yellow ring. They may be found on the petioles and stems also. The leaves lose their colour and break off. In severe cases, the plants stand out with bare stalks. Infected plants do not develop mature nuts. About 30 to 50 per cent of the crop is lost due to this infection. The effective remedy to control the disease is to steep the seeds in 0.25 per cent Formalin solution for four hours. The crop should be thoroughly sprayed with one per cent Bordeaux mixture.

Root-rot is another fungus disease of a soil-dwelling variety. Usually the collar regions of the plant are infected near the ground level. The fungus passes on to the roots and into the seeds under-ground. Small brownish sclerotia, looking like ragi grains, develop at the infected regions and drop down in great numbers on the field. Rotation of crops is the only remedy to control the disease.

Tikka disease appears when the crop is 1½ to 2 months old. It can be traced by observing small brown spots on the leaves. Such infected crops are dusted with sulphur at the rate of 10-12 kgs. per acre.

Sugarcane diseases

Red-rot is the most serious disease of sugarcane caused by a fungus. The mature leaves in the middle of the shoot begin to fade, wither at the tip and extend down the margins leaving the centre green. Later, the whole cane withers and it becomes light and poor in juice. On splitting open a diseased cane, a sour

smell emanates from it and a reddish discolouration in elongated patches or streaks is observed at the internodes starting at the base. The disease spreads rapidly during rainfall. Spraying of one per cent Bordeaux mixture is the usual remedy for this disease.

Collar-rot is a disease caused by another fungus, but the symptoms of the disease are the same as found in the red-rot. The top leaves wither from the tip along the edges. On splitting the cane, the upper part is found to be pithy and dry in the centre. Sometimes, a central cavity, surrounded by a dry white flaky pith, is formed along each internode. Spraying of Bordeaux mixture is recommended to ward off this disease.

Smut is the most easily recognised sugarcane disease. It is prevalent more on thin canes than on old thick canes and is caused by a fungus. A long, curved and whip-like slender shoot, often several feet in length, is produced from the growing point of the cane. This abnormal growth is first covered by a silvery-white thin membrane which soon ruptures exposing the minute spores of the fungus as a dense mass of black dust. Remedies like immersing the cane-cuttings in Formalin solution before planting are employed to check the disease.

Mosaic disease is caused by an infective virus and is noticed by the peculiar molting of the leaves. The longitudinal streaks of green colour, caused by the paling of many small and ill-defined areas, are easily observed on the upper young leaves when held against light. This is a serious disease and can be warded off by cultivating resistant varieties of canes.

Paddy diseases

Blast or *Benki-roga* is the most common disease affecting paddy crop. The infection is noticed in three forms, on the leaves and leaf-sheaths, on the stalk of the earheads and on the grains. Small pale and somewhat watery spots appear on the leaves and leaf sheaths. The spots increase in size and turn brown in colour, with ashy grey centres. They coalesce with one another thus involving the whole leaf. The infected leaves dry and shrivel. Treatment of the seed with chemicals like Agrosan is the common remedy for this disease. Bordeaux mixture is also sprayed on the infected crops to ward off the disease.

Stem-rot is prevalent in all the rice-growing areas of the district. But it is generally overlooked due to the obscurity of its symptoms. The infection is noticed on mature plants with slight discolouration at the base of the culms. On splitting open such culms, numerous minute, round and black shining bodies are found. Collection and destruction of all the infected straw and stubble reduces the incidence of this infection.

Bacterial-blight is another kind of paddy disease, found to affect mostly Taichung Native and IR-8 varieties of paddy. The infected leaves turn red and ultimately dry up. The disease is checked by spraying three grams of Streptocyline mixed in 25 gallons of water.

Insect pests

The following are the important insect pests affecting the crops in the district:

Paddy

(i) *Paddy-hispa* (*Hispa armigera*).—Locally termed as 'Hispa-henu', the insect occurs both in *Abi* and *Tabi* crops of paddy and at times causes serious damage by scarifying the epidermal layers of the paddy leaves. The local practice to prevent the spread of this pest is to clip and burn the leaves containing the larval and pupal stages of the insect. Dusting of B.H.C. 5 per cent has also been taken up by the farmers in recent years.

(ii) *Stem-borer* (*Schoenobius incertellus*).—This insect is more prevalent on *Tabi* paddy, especially if sown early. The larva of the insect bores into the stem of the paddy plant. This results in the formation of empty earheads in later stages, while the plants dry up if the attack occurs in younger stages. The local methods of control against this insect have not been very successful. Hence the nursery plants are sprayed with 4.5 ml. of Parathion and 50 per cent E.C. after 15 days of sowing. The crop is again sprayed at regular intervals with 100 grams of Cuman or 200 grams of Dithane.

(iii) *Grass-hoppers*.—These insect pests appear in large numbers in the months of July and November and eat away the leaves and earhead portions of the plants. In order to control these pests, the nursery plants are sprayed with 4.5 ml. of Parathion and 50 per cent E.C. and the crop is again sprayed at regular intervals with 100 grams of Cuman.

(iv) *Case-worm*.—These insects appear within 40 days after transplantation. The larva appears on the leaves and makes a case. It eats away the leaves and remains in the case. This pest is checked by spraying the crop at regular intervals with 4.5 ml. of Parathion and 50 per cent E.C. or 100 grams of Cuman or 200 grams of Dithane.

Sugarcane

(i) *Early shoot-borer* (*Chilotraea infuscatellus*).—This pest occurs on the late *eksal* crop planted in February—March. The younger larvae bore into the stalks of freshly germinated sugarcane, turning them into 'dead-hearts'. The cultivators have realised that by planting the crop in December-January, they are able to overcome the attack of early shoot-borer to a

large extent. The plants are sprayed with 2 per cent Endrin mixed with a litre of water.

(ii) *Top shoot-borer* (*Scirpophaga nivella*).—The incidence of this insect pest is not so severe as that of the early shoot-borer. It appears when the cane is 1½ to 2 months old. The attacked sugarcane plants present a bunchy appearance and their vertical growth virtually ceases. The cultivators in the district have not so far undertaken any definite and effective control measures against this pest. Therefore, they are now recommended to apply two per cent Endrin granules into whorls.

Jowar

(i) *Shoot-fly* (*Atherigona indica*).—Attack of this pest occurs both on the Khariff and Rabi crops, but is severe on the latter. The attack is only in the younger stages, soon after germination. It causes serious loss, specially when hybrid jowar is sown in December and January. Cultivators adopt a high seed rate to compensate for the loss of jowar seedlings on account of shoot-fly attack. They can also be controlled by applying Thimet granules to furrows before dibbling the seeds or by spraying one ounce of Endrin with four gallons of water once in five days from the date of sowing.

(ii) *Leaf-mite* (*Paratetranychus indicus*).—The attack of Leaf-mite is more severe on the Rabi crop than on the Khariff crop. The insects are found after 60 days of dibbling the seeds. They take shelter underneath the leaf and the leaf becomes red. No control measures were undertaken by the cultivators in the past against this pest. Now it is controlled by spraying wettable Sulphur or ½ kg. of Cosan with 32 gallons of water.

(iii) *Deccan Wingless Grass-hopper* (*Colmania sphenareoides*).—This insect pest occurs only in certain areas of the district in an epidemic form. The attack is more on the Khariff crop. When the attack is severe, the cultivators re-sow the crop. But they are, to a little extent, also controlled by spraying one ounce of Malathion with six gallons of water.

(iv) *Flee-beetle*.—These insects appear immediately after germination and eat away the leaves and make large holes in them. They are killed by dusting B.H.C. 10 per cent at the rate of 8 to 10 kgs. per acre, after about 10 or 15 days of sowing.

(v) *Ear-head Bugs*.—Most of the hybrid jowar plots are attacked by ear-head bugs which eat up the grain. They are controlled by spraying one ounce of Malathion with six gallons of water. To control the attacks of minor pests and aphids on hybrid jowar, Malathion five per cent dust is sprayed after 15 days of sowing.

Groundnut

(i) *Groundnut Aphid* (*Aphid craccivora*).—This is the major insect pest of groundnut in this district. The severity of the attack coincides with the flowering period of the crop and hence the yields are much reduced.

(ii) *Root-rot.*—This is another kind of insect which dwells in the soil and infects the collar regions of the plant near the ground level; it gradually passes on into the roots and also into the stem. The plant ultimately dies away. The pest is checked by following rotation of crops.

Cotton

(i) *Spotted Bollworms* (*Earias fabia* and *Earias insulanc*).—The caterpillars bore into the growing shoots, flower buds and bolls. The incidence of this pest results, on an average, in a loss of 40 to 60 per cent of the crop. The affected plants are up-rooted and destroyed. The plants are dusted with two per cent Parathion or 10 per cent B.H.C. or Malathion. The work of spraying is taken up at two stages of plant growth.

(ii) *Jassids* (*Eupoasea devostanus*).—The leaf-hopper is a major pest of cotton in the district. Nymphs and adults suck the cell sap from the underside of the leaves with the result that their edges turn downwards and subsequently dry up. The affected crop does not grow well.

(iii) *Cotton Mites.*—These appear during the seedling stage of the crop and continue to remain till the harvest. They infest the lower surface of the leaves and also the stem. They lacrate the surface and stimulate a dense growth of whitish hairs, which prove fatal to the plant. They are checked by spraying Endrin or dusting 10 per cent B.H.C. twice a month.

Hybrid Maize

The insect pests like stem-borer, leaf-blight and rust attack the maize crop. In order to control these pests, a mixture of Endrin and Cuman is sprayed. Cob-caterpillars appear on the cobs, eat away the tender grains and thus destroy the crop. Carbaryl 50 per cent W.P. is mixed with water and sprayed to check their growth. As a measure of controlling the soil-insects, root-grubs, etc., Heptachlor six per cent dust is applied to the ridges before dibbling the seeds and, after 15 days of sowing, Malathion is dusted. Dusting the crop with B.H.C. 10 per cent helps to control the insect pests like top shoot-borers, flea-beetles and grass–hoppers.

Mexican Wheat

Mexican wheat is attacked by pests like stem-borer and rust before the crop attains the earhead stage. A mixture of Endrin and Cuman is sprayed against such pests. Rats also attack the crop and eat away the grains. Therefore a 'rat control campaign' is organised in the district in order to prevent their growth. Zinc-phospide and Ratafin chemicals are used for this purpose.

A separate scheme called plant protection scheme is in operation in the district since October 1961. The main object of this scheme is to reduce the loss in the yields of crops due to pests and diseases. The targets and achievements under this scheme in 1968-69 were as below :—

	Target	*Achievement*
1. Seed treatment ..	1,25,500 acres	1,50,289 acres
2. Control of field rats ..	1,50,000 „	94,008 „
3. Control of soil and polyphagous pests.	90,000 „	39,014 „
4. Intensive plant protection measures.	60,000 „	64,085 „
5. Weed control ..	1,000 „	1,018 „

A sum of Rs. 10,43,536 was spent under this scheme in 1968-69 as against the allotted amount of Rs. 18,14,530. Large quantities of chemicals were distributed among the cultivators in the district for purposes of plant protection against pests and diseases. The following statement indicates the quantum of chemicals distributed from 1966 to 1969 :—

Nature of Chemical	1965–66		1966–67	
	Dust	*Ammonium sulphate*	*Dust*	*Ammonium sulphate*
1	2	3	4	5
1. Dust form (in tons) ..	178	79,903.38	1,106.68	1,29,589.94
2. Liquid form (in litres) ..	750	26,890.32	7522-½	65,520.30

Nature of Chemical	1967–68		1968–69	
	Dust	*Ammonium sulphate*	*Dust*	*Ammonium sulphate*
1	6	7	8	9
1. Dust form (in tons) ..	497.550	2,76,664.25	1,150.41	90,000
2. Liquid form (in litres) ..	3,057-½	1,17,407.75	11,267.C0	3,50,000

Farmers' Sons' Training School, Dhadesugur

The Farmers' Sons' Training School, Dhadesugur, started in 1966, is attached to the Tungabhadra Development Centre, Dhadesugur. Farmers' sons and daughters are being trained in this school in batches every year. A ten months' course is conducted and training is imparted in improved agricultural methods, water management, growing of high-yielding variety crops, compost making, plant protection, etc. Ordinarily, the trained candidates settle on their own lands. The actual number of students trained in 1967 was 24 as against 25 in 1966. At present, 50 students are undergoing training. Training courses for tractor operators have been proposed to be conducted at this centre with the assistance of Messrs. Escorts Ltd.

Farmers' Training and Education Centre, Odderhatti

The Farmers' Training and Education Centre, Odderhatti, was started in 1967. The following institutional courses are being conducted at this centre :—

(i) Training in high-yielding varieties to farmers ;
(ii) Training in high-yielding variety programme to farm-women ;
(iii) Training in high-yielding varieties to young farmers ;
(iv) Production-*cum*-demonstration camps ; and
(v) *Charcha Mandals*.

Admissions to the above courses are open only to the residents of the district of Raichur and the four ayacut taluks of Bellary district. More than 230 farmers were trained at this centre in 1968-69 as against 300 farmers in 1967-68. The training course in high-yielding variety programme is open to farm-women, the duration of the course being 10 days ; 307 women were trained at the centre in 1967-68. The duration of the course for training young farmers in high-yielding variety programme is three months. Forty-five young farmers attended this course in 1968-69 as against 67 in 1967-68.

Gramsevaks' Training Centre, Gangavati

A Gramsevaks' Training Centre and a Home Science Wing are located at Gangavati. These institutions are imparting training to gramsevaks, block officers and farmers in improved agricultural practices and allied subjects. District training camps at the district, block and village levels are also being conducted here. The numbers of such camps conducted during the last three years were as given below :—

Year	At the district level	At the taluk level	At the circle or village level
1966–67 ..	2	9	346
1967–68 ..	3	27	195
1968–69 .	3	27	450

The training programme includes refresher courses to gramsevaks and training in Applied Nutrition Programme to gramsevaks, members of mahila mandals, village-level workers, village panchayat members and associated women workers, up-graded courses for gramsevaks and peripatetic training for farm-men and women. In 1967-68, in all, 225 training camps were conducted wherein 1,131 officials, 7 623 farm-men and 332 farm-women received training. The total number of training camps conducted in 1968-69 was 480.

Regional Research Station, Raichur

The Regional Research Station, Raichur, was started as early as 1932 under the State Department of Agriculture. It was transferred to the University of Agricultural Sciences, Bangalore, on 1st October 1965. It is situated two miles away from the Raichur Railway Station on latitude 16.12° N. at an elevation of 1,278 feet above the mean sea level. It has an area of 72 hectares with red and black soils. The mean annual rainfall at the station, taking the average of 17 years, is 718 mm. The major crops grown in the station are jowar, cotton, wheat, groundnut, bajra and navane. The major research programme is to tackle the problems arising out of the introduction of new irrigation practices in the district. Research work on entomology and soil science is also concentrated at this station.

The research station has been recently re-organised and upgraded into a centre of activities in many branches of agricultural sciences. The results of the research work are released by the Directorate of Extension Services of the University. Field days are conducted once or twice a year and the activities of the station are explained to the farmers and their problems are freely discussed. The scientists of the research station lay out national demonstration plots on the fields of the farmers located around the research station. They also collaborate with the technical staff of the Agricultural Department and participate in their programmes whenever called for. The Chief Scientific Officer (Entomology), who co-ordinates the work on problems of various pests attacking different crops in Mysore State, is stationed here. Problems relating to soil management are also being tackled. This is the main station for conducting research on oilseeds and pulses. The station has recently released the following varieties of seeds :—

Groundnut : RS. 206 : It yields 30 to 40 per cent of more pods over TMV-2 and contains about 1.5 per cent more oil in the kernel. It is a bunch-type variety.

RS. 230 : It is better than Pondicherry-8 as it yields 30 to 40 per cent more crops and contains 2 per cent of more oil.

These two varieties of groundnut are found to be suitable to be grown under rainfed conditions.

Cotton : A new variety of cotton called Raichur Hatti or RS. 5117 has also been released for general cultivation. When compared with Western-1, it has 10 per cent more yielding capacity of seeds and the ginning out-turn is 11 per cent more.

A Horticulture and an Animal Science Wing are also attached to the Station. Research is also conducted on fruit and vegetable production. The Animal Science Wing is being strengthened.

Medium Research Station, Gangavati

The Medium Research Station, Gangavati, was established in 1956 by the Government of the erstwhile Hyderabad State to investigate into problems connected with the raising of crops under irrigation so as to evolve suitable crop-growing practices for the area. This station now stands transferred to the University of Agricultural Sciences, Hebbal, Bangalore, with effect from October 1, 1965. This is one of the eleven medium-sized research stations under the control of the University. It has an area of 117 hectares, of which 13 hectares are under dry cultivation and 62 hectares under wet cultivation. The mean annual rainfall in the area, taking the average of 12 years, is 507 mm. The soils at this station are typical medium black with a depth ranging from one and a half feet to three feet. Some parts of the area are utilised by the farm unit section for demonstration purposes. The major crops grown in the station are sugarcane, paddy, gram and jowar. Research is mainly conducted on agronomic aspects of sugarcane cultivation, in addition to other high-yielding varieties. Model agronomic trials sponsored by the Indian Council of Agricultural Research are also being conducted at this station. Cultural, manurial and rotational experiments in the field of cultivation have been carried out on crops like Khariff jowar, cotton, groundnut, wheat and maize under light irrigation.

Agricultural Engineering Institute, Raichur

The University of Agricultural Sciences, Bangalore, has set up an Agricultural Engineering Institute at the Regional Research Station, Raichur. This Institute is functioning here from the academic year 1969-70. At present the Institute is offering a three-year diploma course in soil and water management and farm machinery. Besides offering the three-year diploma course, the Institute will also help post-graduate students in their research work pertaining to soil and water management and farm machinery problems. They will work on the problems of the area to obtain their Master's and Ph.D. degrees in the subject. The work at the Institute will also be co-ordinated with research work in other subjects such as plant breeding, soil science, agronomy, animal

science, plant pathology, entomology, etc., of the Regional Research Station, located in the same campus. There will also be integration of teaching, research and extension activities and knowledge will be disseminated to the farmers of the area and their problems will be brought back to the laboratories of the Institute and the Research Station, so that they can be expeditiously tackled by the scientists working there.

Tungabhadra Agricultural Development Centre, Dhadesugur

There is a farm called the Tungabhadra Agricultural Development Centre at Dhadesugur, which was established for research on irrigated cultivation, mainly of the rainfed crops of the district, and to study the changes that take place in the properties of deep black cotton soils by switching over from dry to irrigated cultivation. The farm is situated at a distance of 16 miles south of Sindhanur. The main objectives of the station are :—

(*a*) to work out the cropping pattern for the Tungabhadra Project ayacut ;

(*b*) land development and irrigation studies ;

(*c*) production of foundation seeds of different crops required in the ayacut area ;

(*d*) to lay out trials on important crop studies ;

(*e*) to study the climatic and water requirements of different crops in the ayacut area ;

(*f*) to provide practical training for farmers' sons ; and

(*g*) to provide practical training for tractor operators of the area.

With the completion of the Tungabhadra Project Left Bank Canal in Raichur district, 5,80,000 acres have come under irrigation. Nearly 80 per cent of this area is under light irrigation of rainfed crops. Since the cultivators of this tract had been accustomed to rainfed cultivation, it became necessary to induce them to switch over to irrigated cultivation. The Agricultural Development Centre helps to develop irrigated cultivation by evolving suitable strains of crops. The area of the farm is about 343 acres, of which 164 acres are under light irrigation and 15 acres under localised paddy and the remaining area is uncultivable. Even though the research station was established in 1943, the actual experimental work was started only in 1952-53, due to absence of irrigation facility. The different sections functioning at this station have specific programmes to be tackled.

The soils of the farm are deep black to shallow black cotton soils, with a clay percentage varying from 45 to 50 per cent. The soils along the river bank are light chalka; they are well drained and suitable for paddy crops. It is proposed to instal a sprinkler irrigation equipment in the farm to irrigate 50 acres of land all the year round so as to study the different sowing dates suited to the Tungabhadra Project ayacut. It is also proposed to establish a 'B' class meteorological observatory here. Trials on food and cash crops, sugar-beet and soyabeans have been taken up along with the agronomic practices on groundnut.

Crop varieties like jowar D-340 and paddy DP-17, etc., have been tried and released for cultivation in view of their better performance. Weedicide trials on hybrid jowar, hybrid maize, paddy and wheat were conducted and the use of weedicide was found more economical than hand weeding. Nucleus seeds required for the area are multiplied in the centre on a large scale. The total expenditure on the centre in 1968-69 was Rs. 2,05,356 as against Rs. 1,67,887 in 1966-67.

Soil Testing Laboratory

A Soil Testing Laboratory is located at the Tungabhadra Agricultural Development Centre, Dhadesugur. The soil samples are analysed at this centre and test reports sent to the raiyats for follow-up of recommendations. In the year 1968-69 upto the end of August, more than 2,320 soil samples were analysed as against 2,971 samples in 1967-68. The laboratory can analyse about 15,000 samples per year on an average.

High-yielding variety programme

A high-yielding variety programme was taken up in the district during the summer of 1965-66 in an area of 856 acres under hybrid jowar and 349 acres under hybrid maize for increasing the food production in the district. The introduction of high-yielding varieties is one of the significant land-marks in the agricultural development of the district. The following crops have been introduced in the district under the high-yielding varieties programme (H.Y.P.): (1) Taichung Native-1 paddy, (2) hybrid jowar, (3) hybrid maize Deccan, (4) hybrid bajra HB-1 and (5) cotton. The first requisite for the success of this programme is good seeds. There are, at present, four seed farms in the district where multiplication of hybrid seeds has been taken up. The Central State Farm near Sindhanur has already commenced its work. This has given a tremendous fillip to the seed industry in Raichur district and there is also a seed processing unit at Sindhanur. In 1965-66, 1,305 acres of land were brought under hybrid jowar and hybrid maize. In 1966-67, an area of 9,121 acres was brought under hybrid varieties, which represented a fresh area of 7,265 acres over the previous year. The area brought under all hybrid varieties in 1968-69 was 1,03,765 acres as against 35,497 acres covered in 1967-68.

The progress of the high-yielding varieties programme in the district during the Khariff season of 1968-69 is presented below :—

Sl. No.	Varieties	Target (in acres)	Achievement (in acres)	Percentage of achievement
1	2	3	4	5
1.	Hybrid jowar ..	10,000	5,714	57.14
2.	Hybrid maize ..	5,000	2,727	54.54
3.	Hybrid bajra ..	13,000	13,107	100.6
4.	TN-1 and IR-8 paddy ..	29,500	19,250	65.25
	Total ..	57,500	40,798	71.00

The target in respect of hybrid jowar could not be achieved in full due to untimely and inadequate rains. The performance of maize in black cotton soils was not encouraging due to lack of drainage facilities. Added to it, the prices for maize were not assured in the market. In respect of bajra, the coverage is slightly more than the target. The short-fall in respect of TN-1 and IR-8 paddy may be attributed to the fact that the quality of these grains cannot be compared with that of the superior variety of HR-35 and GEB-24. The year-wise progress in respect of hybrid varieties from 1966-67 to 1968-69 is shown below (including Khariff and Rabi seasons) :—

Sl. No.	Varieties	1966-67	1967-68	1968-69
			(in acres)	
1.	Hybrid jowar ..	1,944	8,463	10,064
2.	Hybrid maize ..	1,250	5,464	6,843
3.	Hybrid bajra ..	306	6,207	16,212
4.	TN-1 and IR-8 paddy	5,465	13,362	49,576
5.	Mexican wheat ..	156	2,461	14,066
6.	Cotton ..	..	..	7,004
	Total ..	9,121	35,957	1,03,765

The increase in the total area under all varieties in 1968-69 had almost been thrice the total area in 1967-68. It is proposed to cover an area of 2,23,000 acres in 1969-70 and 3,50,000 acres in 1970-71 under this programme. These varieties have caught the imagination of the cultivators as the yield from these varieties is large in addition to the short duration required for their growth. If groundnut is popular in Manvi taluk, paddy is so in Gangavati taluk and hybrid jowar in Sindhanur taluk, while hybrid jowar and hybrid bajra are much favoured in Raichur taluk. The

statement given below shows the increase in production in metric tonnes during the Khariff season of 1968-69 due to the introduction of high-yielding varieties :—

Sl. No.	*Varieties*	*Total production*	*Additional production due to high yielding varieties programme*
1	2	3	4
		(In metric tonnes)	
1.	Hybrid jowar	5,714.0	2,857.0
2.	Hybrid maize	4,150.5	2,727.0
3.	Hybrid bajra	10,485.5	7,864.2
4.	Taichung Native-I .. .	48,125.0	19,250.0
	Total ..	68,475.0	32,698.2

Out of the total production of 68,475 tonnes in 1968-69, the additional increase due to the implementation of the high-yielding varieties programme was of the order of 32,698 tonnes, which was nearly half of the total production. This increased production has undoubtedly helped to improve the economic position of the farmers.

In order to cover more and more areas under these high-yielding varieties, the hybrid seeds, particularly of hybrid jowar and bajra, were sold at subsidised rates so that the poor cultivators could easily purchase them and sow them in their fields. Even selling the seeds at subsidised rates would not help the farmers much unless timely and adequate loans are given to them to pursue the agricultural operations. Hence, in 1968-69, a sum of Rs. 5,77,607 was advanced to the farmers under this programme as against their estimated requirements of Rs. 1,65,73,400.

It is felt that there is need to evolve one or two standard mixtures in respect of the fertiliser dosage required for top dressing of crops, which will increase the yield. It is also considered desirable to draw up a programme for marketing these high-yielding products so that the farmers may readily take to the cultivation of these varieties. However, a large majority of the farmers are aware of the beneficial results of these high-yielding varieties.

Intensive Agricultural District Programme

In order to meet all the requirements of the farmers in a package form, an Intensive Agricultural District Programme (or Package Programme as it is popularly called) was introduced in the district in November 1968-69, covering the five taluks of Raichur, Manvi, Sindhanur, Gangavati and Koppal, with an outlay of Rs. 1,30,000 for conducting demonstrations and

Rs. 2,00,000 for the purchase of mist blowers during 1968-69. It is a joint venture of the State and Central Governments and the technical assistance is provided by the Ford Foundation. Under this programme, an improved method of growing the crops has been formulated by combining all the practices which are conducive to increased production in the area. The advantages of adopting this method are demonstrated to the farmers by arranging demonstration plots on their own fields. The required technical know-how is provided to the farmers at various stages of plant growth, starting from the preparatory tillage to the harvesting of the crops, including the marketing of the produce. The important steps that are taken in raising the crops under this programme include proper tillage, use of good and treated seeds of improved variety, judicious application of manures and fertilisers and after-care measures in order to control pests and diseases. It is estimated that the agricultural production will go up by 50 per cent or even more by following the package of practices.

It is interesting to note that a major part of the credit facilities offered to the cultivators under this programme is in kind. In 1968-69, 215 mist blowers, along with their spare parts, were purchased for issue to the farmers on hire basis. It is proposed to popularise the use of thrashers and cleaners as also maize shellers among the farmers of the ayacut area. A sum of Rs. 1,30,000 is proposed to be spent during 1969-70 for purposes of supplying agricultural inputs, free of cost, to the demonstration plots. Demonstration plots are also arranged to educate the farmers in the use of fertilisers. In the same way, adequate supplies of other requirements like improved seeds, chemicals for controlling pests and diseases and improved implements and tools are also proposed to be provided. Certain incentives like supply of agricultural requirements at subsidised rates, provision of storage and marketing facilities, etc., are also proposed under the programme for 1969-70. It has been proposed to spend Rs. 1,30,000 for conducting field demonstrations, Rs. 30,000 towards reclamation of acid and alkaline soils, Rs. 40,000 towards publicity and production of films, during the year. In addition, several new schemes like strengthening of soil-testing laboratory, distribution of seeds and plant protection chemicals for the development of horticulture, construction of new market yards, establishment of service centres to train farmers in power-operated chaff cutters, maize shellers, tractors, pest-proof machines, etc., research work on agronomic and plant protection problems, establishment of an independent information unit, preparation of village maps showing the watercourses and field channels, starting of a demonstration and mechanised unit at Sindhanur, construction of rural godowns of 100 tonnes storage capacity with the assistance of the National Co-operative Development Corporation, and construction of godowns for storing plant protection

equipments and insecticides at Koppal and Raichur, etc., have been proposed to be taken up under the programme during 1969-70.

Intensive Agricultural Area Programme

An Intensive Agricultural Area Programme was also introduced in the district of Raichur in 1966-67. The cultivation of principal crops such as Khariff jowar, paddy and groundnut in the Khariff season, Rabi jowar and cotton in the Rabi season and paddy and groundnut in summer season are intensified under this programme by adopting all the package of practices. The main object of this programme is to maximise production of improved varieties of crops by using improved seeds, chemicals and fertilisers, etc. In 1968-69, an area of 3,21,935 acres was covered under this programme as against 4,81,363 acres in 1967-68 and 1,58,050 acres in 1966-67. The crop-wise progress achieved under the programme during 1968—69 (during the Khariff season only) is noted below :—

Sl. No.	*Variety*	*Target (in acres)*	*Achievement (in acres)*
		(In Acres)	
1.	Khariff jowar	3,52,160	86,917
2.	,, paddy	17,360	16,792
3.	,, groundnut	1,43,720	46,975
	Total ..	5,13,250	1,50,684

The shortfall in respect of Khariff jowar and groundnut was due to deficient rainfall during the sowing periods. Insufficient supply of seeds at subsidised rates, inadequate supply of agricultural credit, application of ill-balanced fertilisers, etc., are some of the other reasons attributed for the slow progress in achieving the target. During the Rabi and summer seasons of 1968-69 the programme was to cover an area of 1,50,926 acres under Rabi jowar, 31,000 acres under Rabi cotton, 5,000 acres under groundnut, 6,013 acres under paddy and 10,200 acres under ragi, navane and bajra.

Demonstration, in the process of agriculture, is a device employed by the Department of Agriculture to convince the farmers about the package of practices. Old habits die hard and ordinarily it is difficult to convince the farmers as to the usefulness of improved practices in agriculture. They can be more easily convinced through demonstrations than lectures and publications. So, the Department of Agriculture has undertaken the demonstration method to convince the cultivators about the potentiality of any variety introduced under high-yielding variety and intensive agricultural area programmes. Demonstrations also help to cover large areas under improved varieties at a rapid pace. They are ordinarily laid out on ¼ acre to 1½ acre plots

on the fields of the farmers and all the required inputs are given free to them. The Central and State Governments provide the funds required for taking up such demonstration plots. Demonstrations are conducted in the use of improved seeds, use of chemical fertilisers, in preparation of rural and urban compost manures, use of farmyard manure, use of modern agricultural implements, etc. National demonstration plots are also introduced to maximise production per unit area of one acre by taking to double and triple cropping programmes. Demonstrations under the high yielding varieties programme were laid out in respect of hybrid jowar, hybrid bajra, hybrid maize, high-yielding paddy, NPH-1 castor, Mexican wheat, Lakshmi cotton, Hampi cotton, Poorna ragi, etc. The number of demonstration plots laid out in the district under the high-yielding variety and intensive agricultural area programmes between 1966-67 and 1969-70 were as follows :—

Year		No. of demonstrations under H.Y.P.	No. of demonstrations under I.A.A.P.
1966-67	..	481	278
1967-68	..	1,324	251
1968-69	..	1,454	144
1969-70	..	608	423

In order to find out the suitability of new types of fertilisers, three demonstration plots were laid out in 1968-69. Soil samples were taken from the farmers' fields and the results of the analysis were made known before hand and the fertiliser doses were fixed.

Under the National Demonstration Programme referred to above, one-acre plots were selected in the district for demonstration purposes. The Government of India are financing these demonstrations at the rate of Rs. 400 for each two-crop demonstration and Rs. 500 for each three-crop demonstration. Nine such demonstrations were laid out in the district during the past three years. In 1968-69, three demonstration plots were laid out one each in Raichur, Sindhanur and Koppal taluks, to show that three crops could be raised on the same piece of land in a year's duration. For this purpose, only short duration crops were selected. These demonstrations, conducted under the high yielding varieties and intensive agricultural area programmes, covered an area of about two hectares.

A multiple crop demonstration scheme was also introduced in the district in April 1968, first in Manvi taluk and then in Sindhanur taluk, in order to convince the farmers that they could raise two or more crops in a year on the same piece of land and get the maximum yield by following the package of practices. In Manvi and Sindhanur blocks, four and eight demonstrations

under high-yielding varieties programme and six and 12 under intensive agricultural area programme were laid out in 1968–69 and 1069-70 respectively.

Whenever new varieties of crops are introduced, they are invariably tried on demonstration plots and the cultivators are convinced about the adoptability of such varieties.

Integrated Oilseed Scheme

The Integrated Oilseed Scheme aims at increasing the production of oilseeds like groundnut, castor, safflower, sesamum and linseed. It lays greater emphasis on groundnut and castor. Measures like double cropping, multiplication of short duration mutant castor, plant protection measures, etc., have been taken up in the district. The area covered under this package programme in 1968–69 was 49,500 acres of summer crop and 59,900 acres of Khariff crop. During the same year, 782 tons of dust and 1 276 litres of liquid forms of chemicals were distributed at subsidised rates.

Maximisation of groundnut production

A scheme for maximisation of groundnut production has been sponsored by the Government of India. It is in operation in the irrigated taluks of Raichur, Manvi, Sindhanur, Gangavati and Koppal since July 1967. The area covered under this scheme in 1968-69 was 1,09,500 acres as against the targetted figure of 1,20,000. The progress of the scheme in the district during the Khariff season of 1969-70 is as follows:—

		Target	*Achievement*
		(In Acres)	
Area under improved seeds	..	70,000	45,000
" seed treatment	..	35,000	30,000
" fertilisers	..	70,000	30,000
" plant protection	..	70,000	10,000

Sugarcane Development Scheme

The Sugarcane Development Scheme is in operation in Koppal and Gangavati taluks of the district since April 1963. The scheme aims at increasing the sugarcane production by introducing suitable high yielding varieties of seeds and following the package of practices. The yield per acre in the district is low when compared with that of other contiguous districts. In order to find out the reasons for such low production per acre, the University of Agricultural Sciences conducted a survey in the district. The results of the survey and such other details have already been dealt with under crops. The suggestions of the survey team have been scrupulously followed.

In 1968-69, an area of 13,372 acres was covered under the scheme. Under nurseries, 691 acres were covered. Nearly 20 half-field demonstration plots, 692 single item demonstration plots

and 20 free demonstration plots were laid out on the fields of the farmers during the year. In order to encourage the farmers to maximise production, crop competitions were conducted at district and State levels and prizes were awarded to the deserving farmers. The progress achieved under the scheme during 1968-69 was as follows :—

Particulars	*Target*	*Achievement*
Compost pits prepared	40,000	4,073
Number of sets distributed	160	336
Area surveyed under plant protection scheme	10,000 acres	14,655.21 acres
Area treated under plant protection scheme	5,000 acres	5,826 acres
Training camps conducted	10	15
Fertilisers distributed	..	6,415 tons

The scheme for 1969-70 envisages the establishment of seed nurseries, demonstrations on various aspects of sugarcane cultivation, compost drive, supply of improved implements and organising cane competitions.

The Department of Agriculture is publishing information leaflets, booklets, hand bills, etc., to educate the farmers of the district on seasonal conditions, package of practices to be followed, demonstration plots, intensive agricultural district and high yielding-variety programmes, forecasts on pests and diseases, requirements of fertilisers and chemicals and such other seasonwise information.

Financial assistance for agriculture

Out of the total number of 1,338 co-operative societies in the district, 634 are agricultural credit societies, 41 are farming societies and 9 are primary land development banks. The total amount of loans advanced to the farmers by the agricultural credit societies during the year 1967-68 (as on 30th June 1968) was Rs. 1,48,50,000. The primary land development banks are also advancing loans to agriculturists for purposes of effecting general improvement to their lands, discharge of prior debts, sinking of wells, purchase of irrigation pump-sets and oil engines, levelling of lands and purchase of tractors and other agricultural implements, etc. The total amount of loans advanced by these banks under their various schemes such as general scheme, well scheme, irrigation pumpsets scheme and Agricultural Refinance Corpotion Scheme was Rs. 2,94,85,666, as on 30th June 1969.

The details regarding the loans made available by the Agricultural Refinance Corporation, the Agro-Industries Corporation and the National Co-operative Development Corporation, etc., have already been dealt with. In addition to the loans advanced by the co-operatives and other agencies, the State Government

also distributed a sum of Rs. 41,52,038 in the form of *taccavi* loans for agricultural production and land improvement in the district during 1966-67.

Co-operative Farming Societies

As on 30th June 1969, there were 41 co-operative farming societies in the district with a total membership of 918 and a total paid-up share capital, including Government assistance, reserve and other funds, of Rs. 1,46 000. The total working capital of these societies stood at Rs. 12,47,000. These societies have, in all, 4,905 acres of land under their control in the district. Out of this total area, they have so far cultivated 345 acres of land. The Department of Agriculture is offering technical guidance to these societies in respect of control of pests and diseases, cropping programme and the like.

Tonnage Club

A Tonnage Club was established at Sriramanagar, in Gangavati taluk, in June 1968. It is run on the same lines as the Farmers' Forums. The main object of the club is to step up food production in the district by observing strictly the recommended package of practices. It is, at present, engaged in rendering useful service to the farmers by distributing improved varieties of seeds, undertaking large-scale plant protection campaigns with the assistance of the Department of Agriculture, supplying sprayers and other small agricultural implements to farmers on hire and subsidy basis, arranging training programmes in the use of power-operated and ordinary sprayers and taking samples for soil tests, etc. The Agricultural Department has provided the services of a Field Assistant to correlate the work of the Department with the activities of the club. In 1968-69, the club supplied chemicals and fertilisers on the basis of advance indents, distributed 10 quintals of paddy among the farmers who had taken up cultivation of paddy in alkaline and saline affected lands, undertook large-scale plant protection operations in an area of 2,000 acres, arranged crop competitions at taluk and district levels and instituted various incentive measures to popularise high-yielding varieties of crops like paddy, sugarcane, hybrid maize, hybrid jowar, poorna ragi, etc. An interesting feature of the club is that it provides great scope for participation of farmers in its activities.

HORTICULTURE

The district had not been particularly known for any large-scale activity in the cultivation of fruits and vegetables. Except perhaps the local varieties of papaya, all the other varieties of fruits consumed in the district were brought from outside. During the summer season when the two rivers, the Krishna and the Tungabhadra, ran low, their sandy beds offered good opportunities for growing many varieties of water melon. Bananas were grown as a garden crop in isolated patches. Vegetables of

the English type were not grown but were imported from outside. Though the varieties of chillies grown were small, they were of great pungency and much relished as an ingredient of the spices and other culinary preparations that go to make the average man's meal. The vegetable that is common all over the district is the brinjal, which is of a thorny variety, but at the same time quite nourishing. During the rainy season, one can see the cultivation of other common vegetables like pumpkin, cucumber, gourds and greens of different kinds. All these vegetables are grown in small quantities and at no time had there been any export of these commodities outside the district.

There were some good gardens in the Anegundi area of Gangavati taluk in earlier times. There were also a few good citrus and banana gardens. Consequent on the irrigational potentialities created under the Tungabhadra Project ayacut area, there has been some noticeable improvement in the field of horticulture in recent years. The total area localised for *bagayat* cultivation under the Tungabhadra Left Bank Canal is 30,000 acres. The Public Works Department has created a potentiality upto one cusec for an area of 14,925 acres and water has been made available to 7,606 acres.

For the first few years, the Department of Horticulture was engaged in popularising the importance and utility of cultivation of fruits and vegetables and other garden crops to the ayacutdars, by laying out demonstration plots in Sindhanur, Gangavati and Manvi taluks. The area under fruit and vegetable crops during 1968-69 in the district was as given below :—

Taluk		*Fruit crop*	*Vegetable crop*
		(in acres and guntas)	
Gangavati	..	288-00	763-00
Sindhanur	..	109-10	763-00
Koppal	..	61-34	572-00

Taccavi loans were issued for growing fruits and vegetables, but the system was discontinued from 1965. A practice of irrigating fruit plants by canals and ring and basin systems in the ayacut area and by lift irrigation in the rainfed area is in vogue.

The following statement shows the potential created by the Public Works Department and the area irrigated and developed

under *bagayat* in the Tungabhadra Project ayacut area (left bank) in 1967-68 :—

(*In acres*)

Name of taluk		Potential created upto one cusec	Extent of area to which water was made available	Area developed as bagayat	Area actually covered under horticultural plants as on 31-12-1967
Koppal	..	175	34	34	34
Gangavati	..	4,704	4,704	1,113	716
Sindhanur	..	5,190	1,003	970	466
Manvi	.	4,856	1,865	577	389
Total	.	14,925	7,600	2,694	1,605

As against this, in 1968-69, an area of 2,220 acres had been covered under gardens and water was made available to a total area of about 15,646 acres.

In the Tungabhadra Project area, a systematic horticultural activity was noticed with the stationing of an Assistant Director of Horticulture at Munirabad in Koppal taluk. Till then, gardening was unknown and was alien to many of the cultivators in the project area. A programme was drawn up to introduce horticultural crops in an area of nearly 30,000 acres, on a phased programme, in keeping with the extension of irrigational facilities. With that object in view, 20 units, comprising three demonstration plots of one acre each, under mango, coconut and miscellaneous fruit plants and 15 vegetable demonstration plots in selected villages of the Koppal, Gangavati and Sindhanur taluks, were established. More than one lakh of green manure plants and other plants of economic importance were supplied. An orchard and a nursery have been established near Gangavati town for the propagation of fruit plants and for raising seedlings in order to supply them to the cultivators in the Tungabhadra ayacut area.

Orchard-cum-Nursery, Munirabad

There is an orchard-*cum*-nursery at Munirabad which is one of the three large-scale orchards established in the district. It is functioning since 1959 with an area of 29 acres, out of which 18 acres are at present under cultivation. The soil in the area covered by the orchard is the chacolate brown sort. Plants like coconut, sapota, guava, lime, mango, mosambi, jack, papaya and pomegranate are raised in the orchard. It is seen that coconut plants thrive well in black cotton soils. The following table

shows the particulars of seedlings and fruit plants of different vegetable and fruit crops supplied from 1960-61 to the end of 1966-67 :—

Year	*Vegetable*	*Green manure*	*Avenue plants*	*Fruit plants*	*Coconut*	*Banana*
1	2	3	4	5	6	7
1960–61 ..	76,810	16,262	1,787	11,526	..	..
1961–62 ..	1,16,394	59,578	3,908	5,745	6,142	..
1962–63 ..	3,45,925	57,000	1,353	5,745	1,748	94
1964–65 ..	4,474	8,755	5,023	973	..	..
1965–66 ..	52,390	8,400	172	1,114	2,489	..
1966–67 ..	1,29,702	8,300	..	2,300	..	..

The main objects of the orchard-*cum*-nursery are to serve as a demonstration plot, to educate the public regarding the cultivation of fruits and vegetables and to impart practical knowledge on the subject to horticultural trainees. A sum of Rs. 3,217–63 was realised by the orchard through sales of the farm produce during 1967-68. Vegetables and other seedlings are raised and distributed to the raiyats free of cost under a kitchen garden drive.

Government Orchard, Odderhatti

The Government Orchard, Odderhatti, in Gangavati taluk, was started in 1961 with an area of 40 acres. The soil type in the orchard is red loam. All varieties of fruit plants have been grown in the orchard. Mosambi, lime, sapota, guava, rasam and peddarasam varieties of mangoes, coconut, etc., are some of the important fruits grown. Banana and pineapple have been newly introduced. Cultivation of potato has also been taken up. Vegetable seedlings like tomato, brinjal, chillies, onion, knol-khol, cabbage, cauliflower, beet-root, etc., have been raised and supplied free of cost to the growers to create an interest in them in regard to vegetable cultivation. A sum of Rs. 5,469-14 was realised through sales of the farm produce in the year 1968-69. Nearly 8,690 coconut seeds have been sown in the orchard.

Orchard-cum-Nursery, Sindhanur

The Orchard-*cum*-Nursery, Sindhanur, was started in the year 1965 with an area of 24 acres and 11 guntas. The soil is of deep black cotton variety. Both fruits and vegetables are grown in the orchard. Coconut, mango, sapota and guava are some of the important fruit plants grown. Cucumber and Udipigulla variety of brinjal have been recently introduced. A sum of Rs. 343–03 was realised from the sale of these vegetables during 1968–69. Trials for introducing some new varieties of fruits and vegetables are being conducted. A large number of vegetable

seedlings were raised and distributed among the growers free of cost in order to encourage them to grow more and more vegetables.

Horticultural Training School, Munirabad

A Horticultural Training School was started at Munirabad in the year 1960, with the main purpose of imparting training to youngsters who are interested in gardening. The duration of the course is one year. In the beginning, the duration of the course was 6 months and subsequently raised to one year according to the intensity and purpose of the training. Each trainee is paid Rs. 50 as stipend, with residential accommodation in the school campus itself. Training is imparted to students both in theory and practice of gardening. Study tours are also arranged so that the trainees would have a comparative picture of the horticultural development in different parts of the State. So far, fifteen batches of students have received training in this school. A sum of Rs. 16,051.72 was spent during 1967-68 towards the training programme.

It is proposed to start another 20-acre orchard in Manvi taluk so as to provide facilities for raising grape and potato plants which would, in the beginning, also serve as a demonstration plot. There is a small garden of 3.4 acres, planted with sapota and guava plants, in the premises of Sirvar Inspection Bungalow in Manvi taluk. Under the intensive agricultural district programme, a sum of Rs. 25,000 was allotted for the year 1969-70 for purposes of conducting demonstrations in raising fruits and vegetables. It is proposed to lay out 59 demonstration plots in grape, coconut, sapota, guava, mosambi and banana cultivation on the lands of the progressive farmers. Exhibitions and flower shows are arranged by the Tungabhadra Project authorities and the best exhibits are awarded suitable prizes. These exhibitions and shows are being conducted, on a large scale, both under the intensive agricultural district programme and the high-yielding varieties programme.

Fruit cultivation

Fruit cultivation is gradually becoming popular in the irrigated tracts of the district where the supply of water is assured throughout the year. In 1967-68, the Department of Horticulture distributed 14,225 coconut seedlings, 14,095 different kinds of fruit plants and 86,303 banana suckers to ayacutdars. As a result of this distribution, coconut seedlings have been planted in an area of 296 acres and 10 guntas and fruit plants in an area of 242 acres and 20 guntas in the district. The soils in the taluks of Gangavati, Manvi, Sindhanur and parts of Raichur are ideally suited for the cultivation of fruits like banana, guava, sapota, grape and mango. On the other hand, citrus fruits and grapes thrive well in the soils of Deodurg, Raichur, Lingsugur and Kushtagi taluks. Very good citrus gardens are found in Hanumapur, Mudgal, Jalhalli and Kadlur villages of Deodurg

taluk. The total area covered under important fruit crops in different parts of the taluk in 1968 was as detailed below :—

Mango	..	688 acres
Sapota	..	147 „
Guava	..	247 „
Citrus	..	769 „
Pomegranate	..	8.28 „
Fig	..	11.28 „
Banana	..	1,011.2 „

All possible efforts are being made by the Department to popularise fruit cultivation in the district. A new scheme called the Citrus Fruit Cultivation Scheme has been introduced in the district recently. It is expected to cover an area of 200 acres under this scheme for growing citrus fruit plants. In order to meet the demand for fruits and vegetables from the urban area, a new scheme called the Quick-growing Vegetables and Fruits Scheme has also been introduced in the district. Under this scheme, quick-growing variety of seeds and seedlings of fruits like banana, guava, papaya which are in great demand, are being distributed among those cultivators who have taken up vegetable and fruit cultivation within a radius of five miles from the limits of the towns at 50 per cent subsidised rates. Added to these effective measures, the Department of Horticulture has, on hand, yet another scheme called the Fruit Development Scheme, the main object of which is to establish new fruit gardens where irrigational facilities are available and rejuvenate the old ones by resorting to improved cultivation practices. Under this scheme, all the available facilities at the disposal of the Department have been made available to the cultivators. Technical knowledge as to the proper lay-out of new gardens, methods of sowing fruit seeds and planting fruit seedlings and protecting the plants against pests and diseases, etc., is freely made available to the cultivators at all stages of cultivation. As a result of all these measures, the cultivators in the district have now begun to feel the importance of growing fruits.

Vegetable cultivation

Vegetables are ordinarily grown as mixed crops. Vegetables like knol-khol, cabbage, cauliflower, carrot, beet-root, radish, beans and tomato thrive well in the district. Local indigenous varieties like brinjal, lady's finger, cluster beans and chillies are also grown. Improved seeds, both of the local indigenous varieties and the improved varieties, are being supplied by the Department at the rate of 100 to 200 kgs. every year. The area under vegetable cultivation in the district, in 1966-67, was 1,044.90 acres as against 852.89 acres in 1963-64. During the past ten years or so, new varieties like beans, cabbage, knol-khol, cauliflower and tomato have been introduced and are gaining popularity. Trials have shown that vegetables like cabbage and

cauliflower come up well if planted in September. Under the Quick-growing Vegetables and Fruits Scheme, the cultivators are supplied with seedlings, fertilisers and insecticides at 50 per cent subsidised rates. This benefit is extended only to those who grow vegetables and fruits within a radius of five miles from the town. Sweet potato is grown in Kushtagi and Yelburga taluks, while onion is grown as a commercial crop in parts of Raichur, Gangavati, Deodurg and Lingsugur taluks. There is a programme for developing the cultivation of *chillies* in Kushtagi, Koppal and Yelburga taluks.

A Kitchen Garden Scheme has been in operation in the district since 1967-68. The main purpose of this scheme is also to increase the production of vegetables in urban areas where the demand for vegetables is great. This scheme has been intensified in a few villages of Sindhanur, Gangavati and Manvi taluks. In 1967-68, nearly 1,740 kitchen gardens were taken up in the district, as demonstration gardens, in front of houses and vacant places where water was easily available. The purpose of having so many demonstration plots is to show clearly that the inhabitants of the towns can themselves take up the cultivation of vegetables in front of their houses.

Coconut cultivation was practically unknown to the people of this area in the past. It has been introduced only recently. It can thrive well in the black soils of the ayacut area under irrigated conditions. At the end of 1968, there were 18,155 coconut plants in the district. Most of these plants are planted along the bands and borders of the lands of the cultivators. There is a great demand for coconut seedlings in spite of the fact that the Department of Horticulture is supplying 30,000 seedlings every year. Coconut seedlings are raised in all the four nurseries located in the district under the coconut development programme.

Horticultural Societies

Branches of the Mysore Horticultural Society have been started in Raichur, Manvi, Sindhanur, Gangavati and Koppal taluks. There is a proposal to start such branches in Kushtagi and Lingsugur taluks also. These branches supply seeds and plants, arrange lectures on horticultural topics, conduct fruit, vegetable and flower shows, hold field days, conduct training programmes and offer technical advice and guidance in laying out gardens. It has been proposed to organise Horticultural Produce Co-operative Societies in the Tungabhadra ayacut area.

Ornamental gardening

A scheme for the maintenance of existing parks and gardens and for development of new ones is in operation in the district since August 1960. It is a measure taken up by the Department of Horticulture for beautifying the area by planting ornamental and avenue trees. For this purpose, the Department is maintaining garden nurseries and supplying seedlings of ornamental

and avenue trees. There is a proposal to have such nurseries in each taluk. A large number of ornamental, economic and shade-tree plants are raised in these nurseries. Ornamental trees like cassia, tabauia, 'pride of India', etc., have also been propagated. There are several big ornamental gardens at the Tungabhadra dam site, the Kailas Guest House and Indravan hill slopes. The circular pond near the dam is a main attraction to the tourists. It is proposed to raise ornamental nurseries at the hollow block in the project area over an area of 45 acres and river-side gardens between the left bank canal and the main river in about six acres.

Japanese-type Garden, Munirabad

The Japanese-type garden at Munirabad, which is a novel feature among ornamental gardens, is the first of its kind in the State of Mysore. It is, on the whole, unlike any other gardens in the State though there are a few similarities. It is slowly coming up on the slopes of the Kailas Guest House adjacent to the composite dam site at Munirabad. It is being developed without altering the topography of the area. It is to represent deep valleys, streams, hill tops, lakes, ponds and such other physical features of the land as are visible along the hill slopes where rainfall is more. The garden resembles in all respects Japan gardens, where levelling of lands is almost an impossible task. A sum of Rs. 4.5 lakhs has been sanctioned by the Government for its development and the work was started in the year 1967. Out of the total allotted amount, a sum of Rs. 3.5 lakhs was to be spent by the Public Works Department for constructing five pavilions, two lanterns, 50 cement-concrete benches, Japanese-type arch-shaped gates, five ponds, two artificial waterfalls, pagodas, bridges, circular ponds, etc., all representing the features of a park in Japan and the balance of one lakh of rupees by the Horticultural Department for raising the required nurseries and planting them. Most of the civil works have been completed and the work of the Department of Horticulture is in its initial stage. It will be a great centre of attraction for the tourists when fully developed.

Demonstration plots

Demonstration plots have been laid out by the Department of Horticulture in order to convince the cultivators about the use of green manure crops in improving the fertility of the soil and increasing the yield. Under the Intensive Agricultural District Programme, a sum of Rs. 25,000 has been allotted for the purpose of laying out horticultural demonstration plots. It is proposed to have 59 demonstration plots in respect of crops like grape, coconut, sapota, guava, mosambi and banana, at a cost of Rs. 22,000 during the year 1969-70.

Pests and diseases

As per the general survey conducted by the departmental authorities to assess the incidence of pests and diseases of fruit plants and vegetable crops in the ayacut area, it is seen that the effect of these pests and diseases are greatly felt by the cultiva-

tors. A scheme for protecting the horticultural plants against insect pests and controlling their spread is in operation. Mango crop is ordinarily attacked by pests like mango-hopper, borer and fruit flies. In order to control these pests, D.D.T. is sprayed for two to three times at the time of blossom. In certain cases, spraying of Endrin is recommended.

Shooty-mould, an insect pest, attacks sapota. These insects are killed by spraying copper fungicide. Citrus plants generally get diseases like cancer scab and diabac. The branches of the infected plants are dried in sunshine and the twigs are removed and burnt. The common pests of citrus plants are mites, scales, borers and mildew. The standing crops are sprayed with Bordeaux mixture. They are controlled by spraying Parathion and later on by Malathion. Guava plants are infected by diseases like root-rot and scab. Spraying of Malacide 0.2 per cent is taken up as a measure to control the spread of these diseases to other plants.

The common diseases infecting the coconut plants in the district are *anabe-roga*, bud-rot and blight. It has been recommended to spray one per cent Bordeaux mixture over the infected plants in order to control the spread of the diseases. The insect pests like mites and beetles also attack the plants, which are harmful to their growth. In order to overcome these pests it is recommended to spray Malathion and dust D.D.T. at frequent intervals. Sulphur is applied to the soil around the base of the palm tree. The fig plants get a disease called leaf-rust and the spread of this disease is controlled by spraying fungicide.

There is a special squad of spraying attenders, stationed in different circles, to attend to spraying work and educate the public about the various pests and diseases of fruit plants.

The talukwise distribution of the area under fruit plants like mango, banana, citrus, guava, papaya, sapota, grape, etc., for the years 1963-64 to 1967-68 was as detailed below:—

Under Fruits

Taluk	1963-64	1964-65	1965-66	1966-67	1967-68
			(in acres and guntas)		
Raichur	61.15	63.20	63.15	70.20	70.31
Kushtagi	26.27	27.14	43.10	40.05	50.00
Yelburga	35.07	42 01	50.25	51.00	44.17
Lingsugur	28.02	36.14	42.34	47.09	58.13
Koppal	23.35	29.21	31.02	33.17	41.06
Deodurg	37.03	30.08	30.03	44.00	46.12
Total for Fruits	212.09	228.38	280.09	286.11	310.39

Under Vegetables

Taluk	1963-64	1964-65	1965-66	1966-67	1967-68
Raichur ..	158.13	168.38	182.08	184.15	228.14
Kushtagi ..	168.10	158.08	157.23	177.02	178.37
Yelburga ..	185.10	191.10	216.25	107.37	241.01
Lingsugur ..	194.37	197.00	202.14	199.02	214.30
Deodurg ..	147.19	171.35	161.00	179.33	183.14
Total for Vegetables*	854.09	887.23	819.30	984.00	1,046.16
Grand Total ..	1,066.18	1,115.61	1,099.39	1,270.20	1,356.55

Animal Husbandry

Animal Husbandry

A farmer ordinarily keeps at least a pair of bullocks and a few cows, sheep and goats in order to carry on the agricultural operations and provide himself and his family members with milk. The dependence on cattle for agricultural operations is still great, despite some mechanisation of agriculture. Considering the size of the district, which occupies the third place among the nineteen districts of the State from the point of view of area, the number of livestock as revealed by the livestock census of 1966 is not large. But it must be remembered that the arid and dry nature of the district, which is frequently threatened by drought, and the excessive heat, are not ideal for a planned development of its livestock wealth. Even so, the Krishna valley breed of cattle, a medium-sized, spirited and virile breed, thrived in the district ; but it is not now quite popular with the cultivators, both from the point of view of usefulness for agricultural purposes and yield of milk. The cultivators have all praise for the Khillar breed of cattle. With the extension of agricultural activities under the Tungabhadra Project, there is great scope for introducing the Khillar breed of cattle, and increasing attention is now being paid by the Department of Animal Husbandry and Veterinary Services to this aspect of its work. Care is being taken to see that only such breeds which are suitable to the soil, climate and other environmental conditions of the district are introduced or upgraded.

Finding fodder for cattle had been a major difficulty of the agriculturists. The kinds of grass grown were not of a nutritious type and the livestock had to depend upon silage. The harvest season, such as it is, is a good time for cattle since appreciable quantities of green fodder are available ; at other times, they have to depend on stored fodder and the coarse varieties of grass

*The area under vegetables includes the area sown more than once.

growing in patches. With the extension of irrigational facilities under the Tungabhadra Project, fodder cultivation has engaged the attention of the Department. A number of demonstration plots have been laid out in order to educate and encourage the farmers to grow fodder for cattle. The Goshala at Raichur has cultivated 15 acres of napier grass.

The following tables indicate the livestock population of the district as enumerated in the 1956 and 1966 livestock censuss :

1956 Census

Sl. No.	*Name of taluk*	*Cattle*	*Buffa-loes*	*Sheep*	*Goats*	*Other live-stock*	*Poultry*
1	2	3	4	5	6	7	8
1.	Doolurg ..	58,076	12,140	27,614	20,816	2,118	27,862
2.	Gangavati	45,617	9,774	22,088	11,337	1,158	18,858
3.	Koppal ..	38,255	13,286	2,0988	10,971	725	17,193
4.	Kushtagi	62,602	14,066	18,865	13,847	1,179	19,140
5.	Lingsugur	74,420	16,543	41,369	27,011	1,500	22,415
6.	Manvi ..	46,430	11,513	29,855	13,840	2,043	19,012
7.	Raichur ..	40,771	11,693	19,569	9,573	2,002	16,855
8.	Sindhanur	38,365	8,760	14,321	10,209	974	10,820
9.	Yelburga ..	57,358	14,789	15,896	9,442	659	11,755
	Total ..	4,01,954	1,12,564	2,04,565	1,27,046	12,358	1,63,016

1966 Census

Sl. No.	*Name of taluk*	*Cattle*	*Buffa-loes*	*Sheep*	*Goats*	*Other live-stock*	*Poultry*
1	2	3	4	5	6	7	8
1.	Doolurg ..	54,950	11,241	28,218	16,765	1,988	16,813
2.	Gangavati	57,120	17,513	24,092	16,817	1,692	20,521
3.	Koppal ..	49,927	15,432	17,371	15,638	602	17,732
4.	Kushtagi	56,839	14,650	17,813	18,658	791	17,627
5.	Lingsugur	07,814	21,184	33,742	24,309	999	26,127
6.	Manvi ..	49,205	14,436	27,885	14,749	1,775	18,703
7.	Raichur ..	44,199	12,765	37,572	15,740	848	11,810
8.	Sindhanur	22,874	18,310	23,146	18,081	712	14,627
9.	Yolburga	39,666	12,073	15,842	13,471	1,366	13,401
	Total ..	[illegible]	1,37,694	2,25,681	1,54,318	10,773	1,57,361

From the above tables, it can be seen that there has been no remarkable increase in the livestock population of the district over a period of ten years. The number of cattle and buffaloes per 1,000 persons in the district as per the 1966 mid-year livestock census was 366 and 114 respectively, while for every 100 hectares of net area sown there were 246 cattle and 790 buffaloes. As between the livestock population figures of 1956 and 1966, it can be seen that the cattle and poultry population show a downward trend while that of buffaloes, sheep and goats is on the increase. The low population in respect of cattle and poultry may be attributed to the meagre fodder resources and the hot climate, as also the increased use of mechanical implements. The increase in buffalo population may be due to the awareness on the part of the farmers, of the necessity to keep productive animals. With the advent of large-scale irrigation under the Tungabhadra Project, there is considerable scope for livestock development.

Bullocks are mainly used, as in other parts of the State, for heavier agricultural work on the farm. Whereas the cows and she-buffaloes are reared mainly for purposes of milk, they are sometimes used for lighter work on the fields. A majority of the livestock are of non-descript nature and the rest are of the Krishna valley and Khillar breeds. Among buffaloes, the Murrah buffaloes have become popular. Haryana cows have also been introduced. While a Khillar cow costs more than Rs. 500, the cost of a pair of bullocks of the same variety varies between Rs. 2,000 and 2,500. The farmers' preference is for the Khillar breed of cattle, both for their yield of milk and for their usefulness in agricultural operations. 'Deccani' breed of sheep and goats is popular in the district. The breeds of poultry, which are gaining popularity, are the white leghorn and hyline (hybrid).

The main sources of cattle supply in the rural areas are the weekly shandies and cattle fairs held in each taluk. These shandies are either managed by the municipal authorities or the Taluk Development Boards. The details of some of the largely attended cattle fairs in the district are as given below :—

Sl. No.	*Place*	*Taluk*	*Number of animals brought*	*Month when held*
1.	Jalhalli	Deodurg	8,000	April
2.	Naradagadde	Raichur	3,000	February—March
3.	Amareshwar	Lingsugur	10,000	March
4.	Mansgal	Deodurg	5,000	May
5.	Neermanvi	Manvi	4,000	February

A cattle fair at Neermanvi has been newly started for a better supply of cattle to the farmers of the ayacut area and the entire expenditure, in this connection, is being met by the Department of Animal Husbandry and Veterinary Services. In order to attract a large number of healthy and well-built animals to the fairs, a system of awarding prizes has been instituted. Particulars of the two competitions held so far are given below :—

Sl. No.	*Particulars*	1967-68	1968-69
1.	Number of animals competed	200	300
2.	Number of prizes awarded	35	59
3.	Value of prizes	Rs. 2,900	Rs. 2,775
4.	Total amount spent	Rs. 5,499	Rs. 4,604

Veterinary Hospitals

In 1957-58, at the headquarters of the taluks of Raichur, Manvi, Sindhanur, Koppal and Gangavati, there were stationary veterinary hospitals, while at Deodurg and Kushtagi, there were touring billets, manned by graduates in veterinary science. At certain other places too, there were touring billets manned by locally trained personnel. Now, there are full-fledged veterinary dispensaries at all the taluk headquarters. There are three veterinary hospitals at Raichur, Sindhanur and Gangavati and seven veterinary dispensaries at Deodurg, Manvi, Lingsugur, Kushtagi, Yelburga, Koppal and Kanakgiri (Gangavati taluk). In addition to the above, there are 19 rural veterinary dispensaries at different places, *viz.*, Gunjalli and Gillesugur in Raichur taluk, Jalhalli in Deodurg taluk, Athanur, Sirvar, Kavital, Biagwat and Kurdi in Manvi taluk, Salgunda in Sindhanur taluk. Karatgi in Gangavati taluk. Erkalgad and Alawandi in Koppal taluk, Kuknur and Mangalur in Yelburga taluk, Hanamsagar and Malgitti in Kushtagi taluk and Maski, Gajjalagatta and Eachnal in Lingsugur taluk. Livestock from all over the district are brought to these hospitals and dispensaries for medical treatment.

There were not many professional cattle-breeders of importance in this district. The requirements of the agriculturists, both for milk and draught purposes, were met from the local cattle fairs or from those held in the neighbouring districts of Andhra Pradesh and also, to a certain extent, from the fairs held in the districts of Bellary and Chitradurga. Besides, the nomadic breeders from the contiguous areas have been paying periodical visits to some places in this district with bull-calves which they sell sometimes on an instalment basis.

Cattle-cum-Sheep Breeding Farm, Munirabad

A Cattle-*cum*-Sheep Breeding Farm has been established at Munirabad in the Koppal taluk in September 1953, with the specific object of upgrading and developing the breeds. The farm has an area of 565 acres and it has been put to use for various purposes, such as grazing—440 acres, for perennial crops—40 acres, for seasonal crops—5 acres, for roads and buildings—15 acres and for reclamation—65 acres. A provision of Rs. 1,80,200 was made for the development of this farm in 1968-69 as against Rs. 1,75,500 in 1966-67. A foundation stock of the Krishna valley breed of 45 cows and 2 bulls were first brought from the Cattle Breeding and Dairy Farm, Rajendranagar, Hyderabad, in the year 1955, and ten buffaloes and one bull were purchased in 1960 and sixteen buffaloes in 1962. In respect of the foundation stock of local variety of Bellary sheep, eleven rams, 85 ewes, 20 male lambs and 28 female lambs were purchased in 1956. A poultry unit, located at Allanagar, consisting of 35 hens, 3 cocks and 11 country hens was transferred to this farm in 1958. The number of livestock maintained in the farm is as follows :—

Sl. No.	*Livestock*	1966-67	1967-68	1968-69
1.	Cattle	185	200	213
2.	Buffaloes	84	81	80
3.	Sheep	198	140	167
4.	Poultry	5,015	1,216	1,503

The daily average yield of cows' milk in the farm now (1969) is 834.5 kgs. as against 723.7 kgs. in 1966-67, whereas the total production of cows' milk in 1968-69 was 3,00,042 kgs. as against 25 930.2 kgs. in 1966-67. But, in respect of buffaloes' milk, the average milk production fell from 1,783 kgs. in 1966-67 to 1,192.3 kgs. in 1968-69. The total production of milk in the farm has been gradually increasing.

The average yield of wool per sheep is estimated at 450 to 640 grams and the total production of wool in 1968-60 was 94.53 kgs. The average number of eggs laid per bird per year was 106 in 1967-68 as against 182 in 1966-67, and the total egg production was 19,696 (numbers) in 1968-69 upto the end of May. In 1967-68, 3,372 birds and 172 day-old chicks were sold in the farm as against 2,627 birds and 198 day-old chicks in 1966-67. In 1968-69, only 792 birds and 6 day-old chicks were sold. The farm is cultivating an area of 44.35 acres, under irrigation facilities, for the

production of fodder and other crops that are used as food for the farm animals. In 1968-69, upto the end of May, 3,20,796 kgs. of napier grass and 3,34,690 kgs. of hybrid napier and 15,043 kgs. of maize were produced. The farm has supplied 12 breeding bulls, 8 buffaloes and 74 rams during the past three years to *bona fide* breeders.

The total income of the farm from all these sources was Rs. 1,22,325.24 during 1967-68 as against an expenditure of Rs. 1,68,225.11, leaving a difference of expenditure over income of Rs. 45,899.47; the difference of expenditure over income in 1966-67 was only Rs. 3,565.36 and in 1968-69 Rs. 52,262.42. The increase in expenditure over the income may be attributed to the developmental activities undertaken in the farm.

Centralised Semen Collection Centre

A Centralised Semen Collection Centre was established at Munirabad in 1968-69, with the main object of increasing the milk yield of the local cattle through artificial insemination with semen of exotic milch breeds and Murrah buffaloes of India. In addition, it also aims at preventing malnutrition of cattle and cattle diseases, and also at improving the local herd to yield more. It also aims at taking the work of fodder development and eradication of liver-fluke diseases. As the centre is in its initial stages, it is at present making use of the land and equipment of the Cattle-*cum*-Breeding Centre, Munirabad. The activities of the centre covers the entire ayacut area.

Artificial Insemination Centres

Greater importance is being attached to improvement of the breed of cattle by replacing the local variety. For this purpose, two main Artificial Insemination Centres have been established, one at Raichur and another at Gangavati, where Krishna valley and Sindhi bulls and Murrah buffaloes are kept for stud purposes. There are also four Artificial Insemination Sub-Centres at Raichur, Gangavati, Koppal and Sindhanur and three more have been opened recently at Manvi, Kanakgiri and Gajjalaghatta. There is a proposal to start six more Artificial Insemination Sub-Centres in the ayacut area in order to strengthen the Centralised Semen Collection Centre, Munirabad, and ten more sub-centres in the rural veterinary dispensaries under the Fourth Five-Year Plan. Semen of cross-breed bulls and Murrah buffalo bulls is being used at all the existing centres.

Free-Bull Scheme

A Free-Bull Scheme has been in operation in the district with the main purpose of developing the breed of cattle and to provide facilities to *bona fide* local and poor breeders to own high quality cattle. Under this scheme, which was introduced during the Second Five-Year Plan period, the Krishna valley and Khillar breeds and Murrah buffalo bulls are being distributed. During the Third Five-Year Plan period, 23 breeding bulls were distributed as against the targetted figure of 24. In 1966-67,

seven bulls were distributed as against the target of 10. The number of cows so far covered under this scheme by these bulls is 4,978.

Cattle Development Unit, Jawalgera

A Cattle Development Unit was started in the district at Jawalgera in Sindhanur taluk in the year 1968. The unit is still in its initial stages. However, a total number of 928 animals were treated at this unit during 1968-69, the number of animals inseminated, animals castrated and animals inoculated being three, 65 and 2,029 respectively.

Sheep development

The total population of sheep and goats in the district was just over 3,30,000 in 1956, but in 1966 it had increased to over 4,19,000. These belong to what is popularly known as the 'Deccani' breed. They are of a medium size and are not particularly rich either in wool or in mutton. At the Munirabad farm, selective cross-breeding is being undertaken with imported Bikaner rams, and stud rams are also being supplied to the private breeders. There are two Sheep and Wool Extension Centres in the district, one at Ginigera and another at Koppal. They are under the control of the Superintendent, Sheep and Wool Development Scheme, Hospet. Under an Intensive Sheep Development Scheme, 899 Deccani ewes and 44 Deccani rams were supplied to 45 shepherds on the basis of 50 per cent subsidy and 50 per cent loan, at a total cost of Rs. 76,741, in 1965-66. During the same period, 273 Marwari cross and Deccani rams were also given to the shepherds in order to upgrade the local sheep.

Poultry development

The total population of poultry in the district in 1966 was 1,57,361, as against 1,63,966 in 1956. The poultry development work is gradually gaining momentum as it can be taken up in a small way with a very limited investment. For maintaining and rearing of healthy and profitable stocks of poultry birds, the Government started a Poultry Extension Centre at Raichur in 1962-63 with a capacity of 250 layers. On an average, the centre is maintaining 125 layers, producing 54,358 eggs and 2,539 chicks and selling 1,844 birds. There is also a Regional Poultry Farm at Gangavati, established in 1965-66, with a capacity for maintaining 1,000 layers. On an average, the farm is maintaining 600 layers, producing 2,65,794 eggs and 12,527 chicks and selling 8,224 birds. In order to meet the increased demand for improved birds in the Gulbarga Division, the capacity of the farm has now been increased to 1,600 layers under a new breeding programme. These farms are also imparting training in poultry development to villagers, and so far 80 persons have received such training.

Applied Nutrition Programme

There are four Applied Nutrition Programme Blocks in the district located in Gangavati, Kushtagi, Lingsugur and Yelburga taluks. The Applied Nutrition Programme Block at Gangavati was started in 1964-65 and at Kushtagi in 1967-68. At the Gangavati Block, 42 poultry units have been started as per the sanctioned strength, whereas at Kushtagi five out of the ten sanctioned units have been started and the rest are to be started in 1969-70. The number of eggs so far produced at the Gangavati Centre is 11,63,751 and at the Kushtagi Centre 15,356, out of which 28,345 and 1,140 eggs have been given free, for the feeding programme, from the two units respectively. These blocks also offer training to interested persons in poultry keeping. So far, eight villagers at Gangavati Block and 14 at Kushtagi Block have received training. The other two blocks, *viz*., Lingsugur and Yelburga, are proposed to be strengthened with poultry units shortly.

Development *through* Co-operatives

There are three Milk Producers' Co-operative Societies in the district, one each in Lingsugur, Raichur and Gangavati taluks. A Taluk Poultry Farmers' Co-operative Society has been established at Gangavati in 1964. It is preparing poultry mashes and rearing hyline sexed day-old chicks. It has a feed-mix plant donated by OXFOM, which is used for preparing poultry mashes for sale to the poultry breeders in Raichur, Gulbarga and Bellary districts. The average quantity of poultry mashes sold in a year is about 450 tons. The Society also sold poultry feed valued at Rs. 1,86,021 in the year 1967-68. The Society gets hyline sexed day-old chicks and rears them for a period of 2½ months and then sells them to the members of the Society and others. The average daily production of eggs is about 1,100 and the Society sells them to its members and other poultry units located in and around the district. The total value of chicks sold by the Society in 1967-68 was Rs. 15,522, as against Rs. 11,362 in 1966-67. In order to strengthen the financial position of the Society, the Tungabhadra Project Board has sanctioned a loan of Rs. 10,000 towards the working capital of the former. The Animal Husbandry Department has disbursed a sum of Rs. 3,900 through the Society to the poultry breeders under the crash programme.

Rinderpest Eradication Scheme

A Rinderpest Eradication Scheme, sponsored by the Government of India in March 1968, was implemented in the district by a special staff of the Animal Husbandry Department and the work was completed by the end of July 1968. As a result of this programme, it is stated that the district is now free from Rinderpest. Particulars of the number of villages visited and the percentage of coverage under the scheme were as noted below :—

Taluk		*No. of villages visited*	*No. of animals vaccinated*	*Percentage covered*
Deodurg	..	165	36,691	61
Raichur	..	155	34,463	64
Manvi	..	160	46,386	77
Lingsugur	..	175	63,482	74
Yalburga	..	140	62,026	85
Kushtagi	..	166	68,569	91
Sindhanur	..	134	45,567	82.9
Koppal	..	143	54,689	84
Gangavati	..	145	50,465	70
Total	..	1,383	4,62,538	76.9

Animal diseases

The most common animal diseases in Raichur district are haemorrhagic septicaemea, black-quarter and foot and mouth diseases among cattle, haemorrhagic septicaemea and sheep-pox among sheep and ranikhet and leucosis among poultry. Round-worm is the most common and frequent parasitic disease found among all the species. Occasionally, tape-worm infestation is also found. In order to combat liver fluke disease, a separate unit has been started at Munirabad.

The Animal Husbandry Department has been vigilant in the matter of taking preventive measures against animal diseases. Timely inoculations are carried out in all the areas affected and every effort is made to see that the diseases do not spread. It was reported that during 1957-58, the inoculations against haemorrhagic septicaemea in the district numbered 22,381 against black-quarter 12,587, against sheep-pox 6,270 and against ranikhet disease 6,983. Now all these infectious and parasitic diseases are controlled by timely preventive inoculations and dosing. In 1968-69, in all, 94,763 cases were treated, 2,783 animals were castrated and 925 villages were visited by the staff of the Department as against 77,316 cases, 3,100 castrations and 801 villages respectively in 1967-68. It is reported that during 1968-69, the number of animals inoculated for haemorrhagic septicaemea in the district numbered 38,577, for black-quarter 29,296, for sheep-pox 11,480 and for ranikhet disease 6,494. With all these preventive measures undertaken by the Department, it is stated that the mortality from these diseases over a period of ten years had never been more than 0.2 per cent on an average. All types of constitutional diseases of animals and birds are being treated and surgical operations conducted in the veterinary institutions located in different parts of the district.

Goshala, Raichur

The Goshala at Raichur, established in 1943, is being managed by the Goshala Committee, Maliyabad, and financed by donations from philanthropists. There are two units under the management of the committee; the main unit is located at Raichur and the other at Maliyabad. The dry and non-productive cows are kept at the Maliyabad dry-farm. It has 1,100 acres of waste land, which is at present used as pasture land, where cattle are allowed to graze. Out of the total area of waste land, nearly 30 acres are cultivated for growing crops like jowar, bajra and maize, and another 15 acres are under hybrid napier grass. The Goshala aims at improving the breed of cows and maintaining only high milk-yielding cows by gradually replacing the local breed. The Central Gosamvardhan Council of New Delhi has sanctioned a loan of Rs. 20,000 to this institution for purposes of purchasing 39 Gir cows from Gujarat, which are reputed as high milk-yielding cows. The milk produced at the Goshala is being sold to the inhabitants of Raichur town. The average daily milk production is about 170 litres.

Fodder development

Fodder development is a pre-requisite for the development of cattle. There is vast scope for fodder development in the district, especially in the irrigated tracts. Improved grasses like hybrid napier and leguminous varieties have been introduced in the irrigated tracts. In order to popularise fodder cultivation among the cultivators, particularly in respect of hybrid varieties, the Department of Animal Husbandry laid out 17 demonstration plots on the fields of the farmers at a cost of Rs. 2,600 between 1966-67 and 1968-69, in the ayacut taluks of Raichur, Manvi, Sindhanur, Gangavati and Koppal. The result of these plots convinced the farmers of the usefulness of taking to the cultivation of hybrid variety grasses on their own fields. As a further incentive to such farmers, the Department supplied 40,000 root slips at subsidised rates in 1968-69. The hybrid napier grass has become popular among the agriculturists of the district. Hybrid maize is also grown in the district in a large area, which supplies fodder to the cattle.

FISHERIES

Situated in a dry zone, with not many perennial sheets of water, Raichur district cannot lay claim to any great wealth in fisheries. Most of the fisheries are confined to the Krishna and the Tungabhadra rivers and the Tungabhadra Left Bank Canal; a few of the tanks of the district have small quantities of fish. There are about 900 tanks with a water-spread area of about 15,060 acres in the district, of which 10 tanks with a water-spread of about 6,094 acres provide perennial sources of water to the fish. Of these 10 tanks, 7 are fed by the Tungabhadra Left Bank Canal.

Among the important varieties of fish found are the carp, the cat fish, murrels and eels. Among the carp, the *Kemmeenu* (Labeo fimbriatus) and the *Kagemeenu* (Labeo calbasu) are prized commercially on account of their size and succulent flesh. Major carps like Catla, Rohu and Mrigal and the common carp (Cyrinus carpio) have been introduced and they are thriving well in the district. Fingerlings of these two varieties occur abundantly in the rivers and canals during the period from July to September. Other varieties found are the *Hetteparki* (Barbus sarana), *Hellu* (Barbus tor), *Bele-meenu* (Cirrihina reba) and *Arja* (Cirrihina fulungee). Among the cat fishes, which are in good demand in the market, are the *Thoravi* (Mystus seenghala), the *Balemeenu* (Wallago attu) which grows to a size of nearly six feet and is commonly called the fresh water shark, the *Kurdimeenu* (Bagarius bagarius) commonly called the blind fish on account of its small eyes compared to its large body, and the *Arasinaguggarige* (Rita hestata). Among the murrels, the most common are the *Kutchu* (Ophiocephalus striatus), the *Hoomeenu* (Ophiocephalus marulius), and the *Korava* (Ophiocephalus gachua). The two important kinds of eels found in the district are the *Malagu* and the *Havumeenu*.

The fishing is done by means of cast nets, gill nets, hooks, long line and fish traps. Leather coracles are chiefly used for fishing in deep waters.

Cast nets.—These are the most common in the district. The diameter of the net and the size of the mesh vary considerably depending upon the water area. The diameter of the net varies from 15 to 20 feet and the size of the mesh from ¼" to 1½". The large-sized mesh nets are used for catching big fish. The net is made of yarn. It has a circular shape with a hauling-in-cord, passing through an aperture in the centre. From the upper end of the cord, about fifteen subsidiary cords radiate towards the margin of the net where they are all tied to a thick marginal cord termed foot-rope. On the foot rope, iron sinkers are inserted at intervals. The net is operated by one man. The sinkers drag the net to the bottom, trapping the fish underneath. The fisherman slowly drags up the hauling-in-cord, and the margin of the net comes closer and closer towards the centre, when he finally takes the net out of the water.

Gill nets.—These are commonly used for fishing in river pools and in reservoirs. In this net, the fish get caught in the mesh of the net when trying to swim through ; the fish is able to get its head through a mesh, but not its body and when it attempts to free itself the twine slips under the gill cover and the fish becomes gilled. The nets are rectangular in shape, being made of hemp or yarn. Nets made of nylon are also now used by the fishermen.

The length of the net varies from 50 to 200 feet and breadth from 3 to 10 feet. The mesh size varies from 1" to 3". The net, when cast in water, stands more or less vertically like a wall. It is laid either in the night or in the early morning and is collected after the sun rise. The fishermen go into the deeper waters for operating gill nets.

Drag nets.—These are nets used both in rivers and tanks. The mesh size varies from ½" to 1" and the length of the net from 80 to 100 feet, and breadth 8 to 10 feet. The nets are made of thick thread of cotton or hemp.

Long line.—The line consists of a coir cord, varying from 200 to 300 feet in length. Short and strong cotton threads, to the free ends of which hooks are tied, are attached to the coir cord at intervals of about two to three feet. The baits offered are mostly frogs, small live fish, prawns and earthworms. Long lines are operated both in shallow and deep waters.

Fish traps.—These are basket-traps made out of bamboos with special design. They are fixed against small channels and streams and they catch mostly small fish.

The main fishing communities in the district are the Besthas, Bhovis and the Ambigas. But fishermen as such number only about 2,500 in the district. The fishing season is not spread throughout the year and, therefore, the fishermen have perforce to work as labourers in the fields during the season when there is no fishing. In order to encourage pisciculture among these persons, the Department is supplying fish fingerlings for wells and tanks in the vicinity. In 1968-69, nearly 1,600 fish fingerlings were supplied, and stocked in three irrigation wells in Deodurg taluk and ten wells in Kushtagi taluk. During the same year, one hundred common carp fingerlings were supplied to pisciculturists to be stocked in two irrigation wells selected by the Department of Fisheries.

Fish Farm, Munirabad

The Tungabhadra Reservior promises immense scope for the development of fisheries in Raichur district. The reservoir and the channels will be ideal for this development. A fish farm is established at Munirabad near the Tungabhadra Reservoir. The farm has an area of five acres for breeding and stocking fish. There are five nursery ponds, four stock ponds, one square cement plastered pond and one round pond where fish seeds are reared and stocked. During 1968-69, a set of cement cisterns with four partitions were constructed at a total cost of Rs. 9,968 and in the year 1969-70, another set of cement cisterns with two partitions is proposed to be constructed. According to a comprehensive

scheme, which envisages intensive stocking and exploitation as also exploring new avenues of marketing, fifty lakhs of major carp fry were imported from Calcutta for stocking in the reservoir. They were reared in the nursery ponds for a period of two to three months till they attained the size of fingerlings, and later they were lifted from the ponds and taken to tanks and wells where they are stocked. During the year 1967-68, good yearlings were purchased for breeding purposes. During 1968-69, some ornamental fish, like gold fish, etc., were imported from Kurnool and stocked in the nursery ponds for purposes of breeding. It is stated that natural breeding among these fish has now commenced. Besides this, indigenous varieties are being annually collected and released in the reservoir. The requisite number of fish fry are reared to the fingerling stage in the Munirabad and Hospet fish farms before being stocked in the reservoir.

Efforts are being made by the Department of Fisheries for taking up breeding work in the district. In 1968-69, good yearlings were purchased and controlled breeding work was conducted and 5,350 hatchings were produced. Induced breeding of major carps has been taken up in close association with the Assistant Superintendent of Fisheries, Gulbarga; 10,000 major carp fry were produced upto the end of June 1969. Mostly, Rohu and Mrigal breeds were successfully multiplied under this scheme. The breeding work will be continued for some time more.

An Applied Nutrition Programme is in operation in Gangavati, Kushtagi, Lingsugur and Yelburga taluks. This scheme is being executed by the Assistant Director of Fisheries, Gulbarga. Under this scheme, three panchayats in Gangavati Block and five panchayats in Kushtagi Block have been taken up for development of fisheries. Three fish feeding centres have been started at Yerdona, Kanakgiri and Rampur villages for feeding school-going children and pregnant women.

For development of fisheries in the ayacut area, an amount of Rs. 5,000 per year was sanctioned for over a period of six years commencing from 1961-62 to 1966-67. In 1968-69, the amount was raised to Rs. 14,750. In that year, nearly 6,400 common carp fish fingerlings, 300 grass carps and ornamental fish worth Rs. 876.56 were purchased and stocked in Shivapur and Sanapur reservoirs and tanks. Six tanks that are within the ayacut area have been stocked with quality fish seeds. It is proposed to start a nursery at Gangavati for rearing fish. The system of issuing licences for catching fish was dispensed with in the year 1967-68. The right of catching fish is given to the highest bidder in public auction for a period of one year. Fishing near Talavarghat in the Tungabhadra river has been prohibited.

There are at present no fish markets as such in the district, the fish that is landed being sold immediately in the vicinity. There is a good demand for fish, but the supply is very limited. The sale proceeds of fish in the district during 1968-69 amounted to Rs. 3,212 as against Rs. 7,777 in 1965-66 and Rs. 3,702 in 1964-65. There seems to be ample scope for trade in fish, since the number of people eating fish is quite considerable.

TABLE 1

Number of sample households engaged in cultivation by interest on land and size of land cultivated in each taluk of Raichur district, as per the 1961 census figures (based on 20 per cent sample)

Sl. No.	Taluk	Households engaged in cultivation by size of land in acres: Less than 1	1.2–2.4	2.5–4.9	5.0–7.4	7.5–9.9	10.0–12.4	12.5–14.9	15.0–29.9	30.0–49.9	50 and above	Total No. of cultivating households
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Deodurg	11	150	410	368	374	377	156	704	192	124	2,868
2.	Gangavati	16	218	305	339	295	423	102	656	237	81	2,672
3.	Koppal	10	242	383	388	311	412	105	634	201	118	2,813
4.	Kusthagi	4	173	438	382	402	472	126	859	247	95	3,198
5.	Lingsugur	5	91	357	328	434	504	141	997	394	142	3,393
6.	Manvi	7	118	320	264	309	370	103	930	443	202	3,066
7.	Raichur	35	330	468	410	353	344	131	645	252	138	3,106
8.	Sindhanur	1	79	205	218	230	327	87	785	475	187	2,594
9.	Yelburga	9	301	481	474	385	550	162	936	317	165	3,780
	District Total ..	107	1,702	3,367	3,171	3,093	3,779	1,115	7,146	2,758	1,252	27,490

Note :—The total number of persons engaged in cultivation includes those who owned lands or held from Government, held from private persons or institutions for payment in money, kind or share and partly held from Government and partly from private persons for payment in money, kind or share.

TABLE 2

Statement showing the area localised in each taluk under Tungabhadra Project Left Bank Canal in Raichur district from Distributary No. 1 to 106 (miles 141) as in 1969

(In Acres and Guntas)

Sl. No.	Taluk	Heavy irrigation		Light irrigation		Cotton	Total light irrigation	Garden	Grand Total
		Paddy A. G.	Sugarcane A. G.	Khariff A. G.	Rabi A. G.	A. G.	A. G.	A. G.	A. G.
1	2	3	4	5	6	7	8	9	10
1.	Koppal ..	..	4,694—15	155—32	..	..	155—32	203—07	5,053—14
2.	Gangavati ..	16,585—00	15,771—35	18,808—16	17,604—06	7,463—04	43,875—26	5,582—33	81,815—15
3.	Sindhanur ..	9,059—26	..	82,845—18	87,800—32	38,845—25	2,09,491—35	6,613—28	2,25,165—09
4.	Manvi ..	20,432—25	..	84,127—03	77,820—31	27,286—06	1,89,234—00	3,249—26	2,12,916—11
5.	Deodurg ..	..	..	1,474—25	1,468—04	35—05	2,977—34	..	2,977—34
6.	Raichur ..	6,289—19	..	31,034—22	32,539—01	802—11	64,375—34	..	70,665—53
	Total ..	52,366—30	20,466—10	2,18,415—36	2,17,232—34	74,432—11	5,10,111—01	15,649—14	5,98593—10

TABLE 3

Statement showing the village-wise and distributary-wise localised area under Rajolibanda Diversion Scheme

(in acres and guntas)

Sl. No.	Name of Village	Distributary Number	Gross Command	Net Command	Paddy	Light Irrigation	Garden	Total
1	2	3	4	5	6	7	8	9
1.	Hanmapur	1	53—33	47—28	64—19	..	..	64—19
2.	Do	2	.	..	35—01	..	..	35—01
3.	Edlapur	3	..	..	34—30	..	..	34—30
4.	Do	4	..	..	..	13—25	..	13—25
5.	Bichal	3	..	..	43—10	125—14	..	168—24
6.	Do	4	..	.	..	430—31	..	430—31
7.	Gillesugur	5	163—01	83—10	..	59—01	23—00	82—01
8.	Tungabhadra	5	1,119—35	808—35	..	730—33	75—22	806—15
9.	Do	6	671—15	354—12	171—24	..	..	171—24
10.	Bullapur	6	338—22	166—22	166—22	..	..	166—22
11.	Do	7	321—38	244—35	..	235—18	..	235—18
12.	Do	8	8—27	8—22	8—22	..	..	8—22

Table—3 (*Contd.*)

1	2	3	4	5	6	7	8	9
13.	Chik-Manchal . ..	8	726—25	643—16	169—39	281—25	149—21	600—36
14.	Gandhal	8	95—37	77—08	49—18	..	27—30	77—08
15.	Do	9	139—35	133—32	135—32	..	..	135—32
16.	Gundervalli ..	9	..	..	100—31	..	..	100—31
17.	Budinni .. .	10	..	..	..	..	60—19	60—19
18.	Malkapur . ..	10	..	..	131—36	..	..	131—36
19.	Gangwar . ..	10A	..	..	53—04	96—08	14—37	164—09
10.	Talmari	10A	..	..	616—07	118—21	111—23	846—11
21.	Do	11	512—08	417—24	..	376—17	..	376—17
22.	Do . ..	12	1,052—33	656—20	..	570—02	78—08	648—10
23.	Idlapnur . ..	10A	..	..	20—20	..	..	20—20
24.	Do	10B	41—11	41—11	41—01	..	..	41—01
25.	Mirzapur	10B	169—32	130—14	129—34	298—03	..	129—34
26.	Do	11	563—05	391—28	89—29	45—00	..	387—32
	Total ..				2,062—10	3,335—38	541—00	5,939—08

CHAPTER V

INDUSTRIES

RAICHUR, though potentially a rich region, remained industrially backward quite long after the dawn of modern era. Neither the broad-gauge railway line, laid as far back as 1871, connecting Raichur with Bombay and Madras and the metre-gauge line, opened in 1885, linking the district with Machilipatnam in the east and Marmagoa in the west, touching many important trade and industrial centres between them, nor the two world wars altered materially the predominant agricultural character of the district. "Poverty amidst plenty" would have been, perhaps, the remark of an industrialist when his eyes surveyed the expansive black soil of the Raichur doab. He would fain visualise the time when a harmonious blend of increased agricultural and industrial activities would put an end to poverty and assure a high standard of living for the people of the district. Thanks to the mighty Tungabhadra Project, the various developmental schemes under it and under the successive Five-Year Plans are imparting a new measure of diversity to the economy of the district and industries have started coming up. There is ample scope for starting new industries, both big and small.

The occupational classification of the people of the district discloses the fact that only a very small percentage of the population is depending upon industries for their livelihood. According to the 1951 census, out of the total population of 9,53,640, 77.3 per cent depended upon agriculture and only 6.3 per cent on production other than cultivation, commerce claiming 4 per cent. If we take into consideration the percentage distribution of the working force between primary, secondary and tertiary sectors for the year 1961, it is 77.1, 8.9 and 14.0, respectively. Out of the total number of 2,378 factories in the State, employing 1,91,913 people, only 179 factories, employing 4,284 people, were in Raichur district in the year 1961. Even as a secondary means of livelihood, industry had only a poor base in the district. In the past, factors like non-availability of power and irrigational facilities, poor condition of agriculture and infra-structure, lack of finance and incentives and enterprise in the

industrial field among the people were responsible for the industrial backwardness of the district.

Mineral resources

Though Raichur is poor in forest resources, it is rich in mineral wealth. The Dharwar rocks of the district are fairly rich in economic minerals, important among them being gold, iron, copper, galena, quartz, mica, feldspar, ochres, ilmenite, building stones and laterite brick earth. Raichur is a gold-producing district and its history of gold-mining dates from as far back as the Ashokan times. Several old workings are found scattered over parts of Hutti, Wandalli, Maski and Topaldoddi. Next to Kolar, Hutti is the biggest centre of production of gold in the country. Feldspar of ceramic use is found in Raichur taluk. The gritty murram, which is a very good material for the manufacture of tiles, bricks and pottery, occurs near Maski and Kavatgi.

The various types of granites, gneisses and dyke rocks occurring in the district are of a high decorative value. They serve as a good material for building and also as road metal. The sand-stones of Kushtagi taluk have been found to be well suited for carving purposes. Iron ore of low and medium grades is found near Rajavoli and white quartz reefs suitable for glass and ceramic industries occur at several places in the district. Raichur, Sindhanur and Lingsugur are some of the important places where saline salts are found. There is red ochre near Kushtagi. (*See* also Chapter I).

Old-time industries

The excavations conducted by archaeologists at Maski and some other places in the district revealed that the area was at one time an important centre of craft industries. A number of old specimens of jewellery, beads, artistic pottery, metalware, arms, coins, tools and implements that were found in the region give an idea of the high degree of craftsmanship that existed then. The decay of these arts and crafts is a sad story. Frequent wars and recurring famines and pestilences ravaged the country. The rainfall decreased due to the denudation of forest area, making the fertile lands less productive. The village artisans fell on hard days with the constant decline in the prosperity of the region. To add to their difficulties, later they were faced with competition from cheap, machine-made, imported goods. The artisans, unable to reconcile themselves with the rapidly changing economy of the country, began to depend on local *sahukars* or money-lenders who exploited them to the maximum possible extent. All these causes led to the decline of the old industries. Despite these adverse conditions, several arts and crafts were surviving even during the recent past. Among these, leather work, pottery, manufacture of handloom products, hand-embroidery and making of wooden idols and toys had their own pride of place in Raichur district.

Recent years have seen the rise of some new industries; cotton-ginning and pressing factories and oil mills have been started; a sugar mill at Munirabad, reinforced cement concrete manufacture at Raichur and gold-mining at Hutti are the other industries, and a review of these is made in the course of this chapter. The execution of the Tungabhadra Project is ushering in a new era of prosperity. The power development schemes undertaken by the Government are affording electricity for starting a large number of new industries and the Government are giving every other possible facility and concession with a view to helping industrial development of the State at a quicker pace.

Power development

Hydro-electric power began to flow in the district of Raichur very late. Its supply began, for the first time, in 1963 from the Munirabad Power House, which is on the left side of the Tungabhadra Dam, heralding a new era of prosperity in the district. Till then, only diesel power was available at a few important places. Raichur town received power generated from diesel sets in the year 1935. Three diesel sets of 180 kw. each, installed at Raichur, supplied power for Raichur town and Devarsugur Water Works. In 1955, power was supplied to Koppal and Gangavati towns from the thermal set installed at Munirabad for feeding the project area. The district had to wait for sometime more, till the implementation of the Tungabhadra Project, for the arrival of hydro-electric power. The Tungabhadra Project, though primarily an irrigation project, is also generating power. The Tungabhadra Hydro-Electric Scheme on the left bank of the river was started by the Government of Hyderabad and, on the reorganisation of the States, it was transferred to the Government of Mysore.

The total power potential of the various power sites was estimated at 1,72,500 kw., 1,00,500 kw. on the left bank and 72,000 kw. on the right bank. The Government of Mysore decided to take up construction of the power house at the foot of the dam, on the left bank only. The sanctioned scheme envisaged the construction of a power house with two units of 9,000 kw. each, with provision for two more units of the same capacity, and the laying of transmission lines, interconnecting the power house and sub-stations in the districts of Raichur and Gulbarga and beyond. The power generated was proposed to be transmitted to a distance of 190 miles through 110 KV lines, to a distance of 117 miles through 33 KV lines and to a distance of 250 miles through 11 KV lines. The project also envisaged the construction of step-down stations at Sindhanur, Raichur, Shahapur, Shahabad, Hutti, Maski, Yadgir, Gulbarga and Humnabad.

Turbines and generators were supplied by Messrs. Hitachi Limited, Japan. Turbines of 12,500 H.P. each, when operating under the net head of 65 feet, with a rating capacity of 1,000 KVA

at .9 power factor, were of verticle shaft single runner connected directly to vertical shaft generators. The Government decided to get the machinery erected by its own engineers, and so, four engineers were deputed to Japan to study the various components of the machinery. During the Second Five-Year Plan the power house was completed and one of the generating units was installed. The outlay for the purpose during the Second Plan was about Rs. 330 lakhs.

Considerable progress was achieved in the development of hydro-electric power during the Third Plan period and three units of 9 000 kw. each under the left bank (Munirabad) scheme, were commissioned. Construction of 110 KV, 33 KV and 11 KV lines was taken up in the year 1961 with sub-stations at Raichur, Sindhanur, Maski and Hutti. The 110 KV line, starting from Munirabad Power House, was extended upto Raichur and further on to Gulbarga side. The length of the 110 KV line is nearly 146 miles and it costs about Rs. 1,00,00,000. A sub-station has been installed at Sindhanur to tap the power from this line for further distribution on 33 KV and 11 KV lines to feed the industrial units of Hutti Gold Mines, etc. The cost of these two lines is placed at about Rs. 13,00,000. Two more sub-stations have also been installed at Maski and Hutti at a cost of nearly Rs. 18 lakhs. A new 110 KV line has been drawn from Sindhanur to Hutti, a distance of 35 miles, for meeting the enhanced power requirement of Hutti Gold Mines. A sub-station of 20 MVA capacity has also been installed at Hutti.

With the commissioning of the sub-station at Sindhanur at the end of 1962, Sindhanur and surrounding villages received power. The transmission lines were further extended upto Raichur city and it received hydro-electric power and light in June 1964.

Rural Electrification

There was hardly any village served by electricity before the advent of hydro-electric power. But now more and more villages are being covered by the rural electrification programme. The demand for pumpsets is mostly from the taluks of Koppal, Yelburga, Kushtagi, Deodurg, Lingsugur and a part of Raichur taluk which have not been served by irrigation facilities provided by the Tungabhadra Project. In 1966-67, more than 50 villages were electrified and more than 300 irrigation pumpsets were serviced in the district. The corresponding numbers during the years 1967-68 and 1968-69 were 95 and 1,234. The following statement shows the number of villages electrified and irrigation pumpsets serviced upto end of March 1969 in the various taluks of the district :—

Sl. No.	Name of taluk		No. of villages electrified	No. of irrigation pumpsets serviced
1	2		3	4
1.	Raichur	..	26	158
2.	Manvi	..	25	170
3.	Sindhanur	..	28	81
4.	Gangavati	..	25	27
5.	Kushtagi	..	17	90
6.	Lingsugur	..	37	325
7.	Deodurg	..	16	115
8.	Koppal	..	46	542
9.	Yelburga	..	20	230
	Total	..	240	1,738

It was also proposed to supply power to about 30 villages and service 800 irrigation pumpsets during 1969-70. From 1964 to the end of April 1969 the extension of 11 KV lines covered a total distance of more than 800 miles. The cost of this scheme, including that of electrification of villages and servicing of pumpsets, was about Rs. 800 lakhs.

Power for Industries

The hydro-electric power of the Tungabhadra Project is not only serving the needs of the farmers but also that of the industrialists. It has provided a sound base for industrial expansion and development in the district. Among the few notable industries developed after the advent of hydro-electric power, mention may be made of Hutti Gold Mines, Chemicals and Fertilisers, Sugar, Pulp and Board at Munirabad. About 800 kw. of power has been earmarked for the proposed co-operative spinning mill at Raichur which is expected to go into production very shortly. In the rural areas also, the people have not failed to realise the importance of power for industrial purposes.

The arrival of abundant power in the district has raised new hopes in the minds of the people. It is leading them into new fields of adventure on the developmental front. More and more people are coming under its spell and the number of consumers has gone up to 20,000. The revenue realised from diesel sets had been less than a lakh of rupees per annum. Now it has gone up to Rs. 45 lakhs per annum. It is proposed to have step-down stations at Koppal, Gangavati and Kushtagi to meet the demand from both agricultural and industrial sectors.

The magic of electric power has attracted the attention of the housewives too. It is slowly making its way into kitchens as well. In urban areas like Raichur city, Hutti and Gangavati and

other places, the demand for "All Electric Houses" is on the increase. The numbers of connections provided for this purpose by 1969 were about 60 in Raichur city, about 30 in Hutti and about 10 in the Koppal sub-division.

It is estimated that the demand for power is increasing at the rate of five per cent per annum. Action has already been taken to supply also Sharavathi power from Hubli to the Munirabad region. The Munirabad area will be fed on 220 KV lines after the new receiving station at Munirabad is completed. The work relating to this is now progressing.

Administrative set-up

The generating station at Munirabad is under the control of the Mysore State Electricity Board. The revenue district of Raichur has been made a part of the Munirabad Circle, which came into existence on the 31st August 1968, with its Circle Office at Munirabad, while the district itself forms the Raichur Division, which was established in the year 1964, with its Divisional Office at Raichur. There are three sub-divisions at Raichur, Sindhanur and Koppal in the division, each with an Assistant Engineer. There is an Executive Engineer (Electrical) for the Division, who is under the administrative control of the Superintending Engineer (Electrical) who is in charge of the Munirabad Circle. Maintenance and distribution of power, maintenance of sub-stations, construction work relating to electrification of villages and towns and arranging supply of power for irrigation pumpsets—these are the main functions of the Divisional Office headed by the Executive Engineer. There are about 130 members of staff working under the control of the Executive Engineer, including three Assistant Engineers, two Junior Technical Assistants, twelve Junior Engineers, 29 Supervisors and other technical and ministerial staff.

LARGE-SCALE INDUSTRIES

Next to Kolar, Raichur district has the distinction of having gold mines which are of economic importance to the State and the country. Gold occurs in the region in reefs of quartz in the belts of the Dharwar schists, particularly in the Maski-Hutti-Shorapur belt.

Gold-Mining Industry

The history of gold-mining in the Hutti area is said to have its beginning in the pre-Ashokan period. Hutti gold mines are considered to be one of the most ancient metal workings in the world. Prospecting in recent times had disclosed a large number of ancient workings scattered throughout this area. It is evident from the remains of these workings that, at some unknown date, this area was systematically explored, prospected and mined for a long period by some race of people highly skilled, not only in mining but also in the extraction and metallurgy of gold. Some

of these ancient workings are of considerable depths and at Hutti, there is the deepest known ancient working in which the people followed a gold-bearing vein to a depth of 640 feet below the surface. "Numerous old workings for gold scattered in various parts of Raichur doab and Surapur taluk of Gulbarga district afford ample evidence that at some unknown date this country was systematically explored, prospected and mined for gold by a race of people highly skilled in mining and simple practical methods of metallurgy. The old Hutti workings which reached a phenomenal depth of 640 feet—unknown in any other part of the world in ancient metal mining—testify to the skill of these prehistoric miners," says A. M. Herson*. This may be said to be a tremendous achievement of those days. It was very necessary to clear the water from the workings. It was a great problem for the miner, that too at that depth. The bottoms of these ancient workings were completely filled with broken *chatties* or pots which would indicate that the water entering the working was removed by means of these *chatties* passed from hand to hand, a long human chain from the bottom of the working to the surface. In addition, they were well aware of the ease with which timber could be used for the support of underground workings. Timber props have been removed from the ancient workings in this area, still in a good state of preservation, showing the original axe marks where they were cut to fit against each other. Some of these timbers also contain deposits of minerals in the interior of the timber showing that they must have been in these workings for many hundreds of years. One piece of timber taken from an ancient working was tested to determine its age and the tests confirmed that this particular piece of timber is approximately 2,000 years old.

Examination of some of these old workings has shown that the miners used 'fire-setting' as the means of breaking the rock before carrying it to the surface for gold to be extracted. Fire-setting is a very simple operation consisting of the lighting of a fire against the face of the rock. When it is sufficiently hot, cold water is thrown on to the face of the rock with the result that the sudden cooling of the rock produces a rapid contraction and pieces of the rock break off. Fire-setting is necessarily a slow method of breaking a rock and that a long period of time would have been required for any working to reach the depth of 640 feet.

The gold-bearing quartz was crushed on the surface between a hollow block and a curved rolling block (now known as Mullackers) and a large number of these crushing stones have been

*A Popular Geology of Hyderabad (Hyderabad Geological Series – Bulletin No. 6) by A. M. Herson, Government Press, Hyderabad, Deccan, 1948.

found in the area. A number of them were still in use at the mines in recent times, for the crushing of samples of gold-bearing quartz. Gold was recovered by passing the crushed ore, mixed with water, over goat skins, the fur trapping the heavy particles of gold while allowing the lighter minerals to be washed off. The final stage was the smelting of these concentrates of small particles of gold in an earthenware crucible, when the particles melted and were poured into some form of mould to form a solid mass of gold. This lump or mass of gold could then be utilised for making ornaments or for such other purposes for which it was required. In this connection, it is interesting to note that there is some evidence to show that these ancient miners were also aware of the fact that gold would combine with mercury to form an amalgam, and that this process, which is used today for the purpose of extracting gold from gold-bearing ore, may have, in fact, also been used by them.

At some remote time, this mining activity, for reasons unknown, ceased, and during the succeeding centuries, all traces of the ancient workings at surface were rubbed out, as the workings became filled with surface soil. For a long period of time, might be about two thousand years, therefore, the evidence of the skill and ingenuity of these ancient miners lay hidden.

Modern mining

Modern mining operations at Hutti commenced in 1886 when the Hyderabad (Deccan) Company was formed to carry out systematic investigations and prospecting for gold in the area. This company carried out extensive prospecting operations for about 12 years from 1887–1899, and discovered more than 300 ancient workings in the Hutti, Topaldoddi, Wandalli, Maski, Budinni and Uti areas in the Raichur doab and at Manglur in the Shorapur taluk of Gulbarga district. But only in the case of a very few of these workings, actual testing upto the bottom portions was carried out. Soon, they realised that diffused operations of this sort would be an unprofitable venture, when Hyderabad (Deccan) Company formed three subsidiary companies—(i) the Hutti (Nizam's) Gold Mines Ltd., (ii) the Topaldoddi Gold Mines Ltd., and (3) the Wandalli (Deccan) Gold Mining Company Ltd., with a view to undertaking detailed investigations and taking measures for development of the mines.

The Topaldoddi Gold Mines Limited.—The Topaldoddi Gold Mines Limited started its mining operations in the year 1905 in the neighbourhood of Topaldoddi and Chincherki, both of which are situated about ten miles away from Hutti. It produced 2,132 ozs. of gold worth about £8,319 (Rs. 1.12 lakhs) in 1908. The ore of this mine was reported to have proved to be of low grade. The company closed down the mines in the year 1908 and its assets were transferred to the Hutti Company.

The Wandalli (Deccan) Gold Mining Company Limited.—This company commenced its operations in the year 1891 in the vicinity of the village Wandalli, about seven miles east-north-east of Hutti, where a large number of old workings were traced. Five shafts were sunk through the old workings to different depths, totalling, in all, about 1,100 feet. A few trial crushings were reported to have shown 9 to 10 dwts. of gold per ton. Mainly, east-west reef lodes were mined. The yield of gold varied from place to place. It ranged between nil and six-and-a-half ozs. per ton of ore. Pyrites and arsenical pyrites were stated to have been associated with the gold found in this reef.

The highest production in this mine was in the year 1899 when 18,970 tons of ore yielded 7,882 ozs of gold. It was said that almost the entire production of gold in the former Hyderabad State during 1898-1900 came from this mine. Mr. Bosworth Smith, a well-known mining engineer of those days, examined this mine later. The ancient miners, according to him, had gone vertically more than 400 feet down. As regards the work of the company, he observed that exploration had not been carried out thoroughly in the region and mining then had never gone below 750 feet in depth. He was of the opinion that Wandalli Mines had great possibilities.

The Hutti Gold Mining Company Limited.—This company started its operations in the auriferous lodes in the Hutti field. Its crushing operations commenced in the year 1903 with a production of 3,809 ozs. of gold. It went up to 21,200 ozs. in 1914, the average output during the period from 1914 to 1918 being 16,539 ozs., which was valued at £63,463 (Rs. 8.36 lakhs). The total bar-gold produced during the period from 1903 to 1920 was about 256,747 ozs., valued at £1,010,757 (Rs. 1.36 crores). The total quantity of ore treated was about 417,000 tons. The yield, on an average, stood at 11.37 dwts. per ton. During the operations of this company, much of the gold was extracted from the auriferous quartz of the Main Reef Mine. The workings were reported to have reached a depth of 3,500 feet below the surface.

From 1904 to 1916, dividend was paid regularly. But after the outbreak of the First World War, things changed. The company came to the conclusion that the richer portions in the reef were exhausted and money was required for further exploration and development. But it could not raise sufficient funds on account of the adverse conditions prevailing because of the First World War. The company was closed down in the year 1920, mainly due to lack of funds and technical difficulties.

The World War, more than anything else, had brought about the end of the gold mining industry in this area. The subsequent

period of about 20 years passed with very little interest evinced in the industry. After this period, there was a revival of interest in this industry due to the rapid rise in the price of gold. The Geological Department of the former Hyderabad State took up, in 1932, a revision survey of the gold-bearing rocks of the Raichur doab and the Manglur field of Gulbarga district. In addition to the old areas, new areas, in the Maski band, were also prospected. A long line of ancient workings was newly discovered in the auriferous zone near Hunkuni in Deodurg taluk. Encouraged by the results of these attempts, the Government of former Hyderabad State launched upon a programme of detailed prospecting in the most favourable zones of Hutti, Maski and Manglur areas.

Hutti Mines

Messrs. John Taylor and Sons started a detailed prospecting of the Hutti Mines, located fifty miles due west of Raichur, in December 1937, under the control of the Hyderabad Government. Numerous old workings were trenched. Geophysical prospecting was adopted wherever possible and diamond-drilling operations were conducted. These investigations brought to light that the reefs in the area run altogether for a length of more than 11,000 feet. Till then, only a length of 3,000 feet had been prospected. It was decided to re-open the mines at Hutti and to bring the mines into production by erecting, in the first instance, a pilot plant to treat 150 tons of ore a day, with provision for expansion to 300 tons a day. Additional funds were made available for this purpose by the Hyderabad Government. The designing of the plant and the programme of underground exploration were completed; but due to the deteriorating international situation, it became difficult to obtain some of the heavier crushing machineries. During the three years from 1939 to 1942, however, a considerable part of the development programme was completed. The Village Reef Mine, near the old Hutti Mine, and the Oaklay's Reef Mine were de-watered and developed with detailed re-sampling. By 1942, 229,536 tons of ore reserves, of an average yield of 4.62 dwts. of gold per ton, were proved. The cost of these operations was about £100,000 (roughly about Rs. 13.60 lakhs). Finding the results of this venture satisfactory, the Hyderabad Government sanctioned a further sum of £250,000 (Rs. 33.75 lakhs) for re-establishing this gold mining industry. But unfortunately, because of the outbreak of Second World War, all the operations had to be suspended. In May 1942, the Hyderabad Government decided, in view of the position then obtaining in India, to place the mines on a care-taker basis, *i.e.*, to keep the underground workings open and buildings and machinery in good condition until such time as it would be possible to proceed with the project.

At the end of the war, in the middle of 1945, the Government of India sanctioned licences for import of machinery under the

Post-war Reconstruction Scheme and in October 1945, the Hyderabad Government sanctioned the purchase of the necessary plant and equipment. Early in 1946, active operations were resumed at Hutti after a break of four years.

Hutti Gold Mines Co. Ltd.

The operations at Hutti between 1937 and 1947 were under the control of the Hyderabad State Railway Board, but on successful completion of the original development and prospecting programme, it was finally decided that a company with an authorised capital of one crore of rupees (Osmania currency) and an issued capital of O.S. Rs. 60 lakhs should be floated to continue operations. The Hyderabad Government purchased 80 per cent of the shares and the remaining 20 per cent were available for public subscription. A company called "The Hyderabad Gold Mines Co. Ltd.,' was formed in 1948 and registered with the Registrar of Joint Stock Companies, Hyderabad, and shortly afterwards, the issued capital was increased to O.S. Rs. 70 lakhs. In January 1949 the issued capital was again increased by O.S. Rs. 10 lakhs to a total of O.S. Rs. 80 lakhs. With the reorganisation of States in 1956, this company was transferred to the Mysore State and came under the control of the Mysore Government. The name of the company was then changed to "The Hutti Gold Mines Company Ltd."

The total investment of the company till about the end of December 1968, was about Rs. 5.1 crores—about Rs. 57 lakhs in the form of share capital and the remaining amount of Rs. 4.53 crores being in the form of loans from the State and the Central Governments. These loans were provided for exploratory and developmental purposes, and it has been envisaged to raise the production to 910 tons per day from the present level of 400 tons per day. The loans will have to be repaid in a period of 15 years, after the schedule of enhanced production is reached.

Mining operations

The gold-bearing reefs are explored and developed horizontally along the strike by means of tunnels or 'drives', and downward by means of 'rises' and 'winzes'. The drives are developed at vertical intervals of approximately 30 to 35 metres. After the initial exploration and development, stoping (or production) operations are started to extract the ore between two successive levels. The stoping method adopted here is known as 'Shrinkage' or 'Magazine' stoping.

Pneumatic drills operated by compressed air are used for all mining operations. Water, entering the mine, is collected in large sumps at different levels and pumped up to surface. About 150,000 gallons of water per day is pumped out of this, most of which is utilised in the gold-recovery plant in the treatment of the ore and recovery of gold.

Process of gold recovery

The ore, found in the underground workings, is broken into pieces by drilling and blasting before it is hoisted up to the surface. Then it is sent to the mill where it is crushed and ground to fine powder. This powder is then mixed with water and passed over tables covered with blankets which trap the free gold. The further purification of this concentrate of gold is effected by melting it with fluxes to remove the impurities. Then it is cast into bars, weighing about 25,000 gms. each. These bullion bars are sent to the Government of India Mint in Bombay for refining. The gold which is not recovered by the blankets is either very fine or is associated with other minerals such as iron sulphide. This is, therefore, agitated in a weak solution of sodium cyanide which dissolves the major portion of the gold. The cyanide solution containing dissolved gold is passed over zinc shavings which causes the gold to be precipitated. This gold precipitate is treated in acid and then roasted to remove impurities and then cast into bullion bars which are also sent to the Bombay Mint for refining.

The gold bars, sent to the Bombay Mint, are further purified to the international standard of 999.5 fine (1000 fine is 24 carat gold) and made into 'standard' pieces of guaranteed weight and purity. of 19 gms., 50 gms., 100 gms., 200 gms. and 500 gms. These pieces are sent to various centres where they are sold to industrial consumers who hold permits under the Gold Control Act, 1968, at a price approved by the Gold Control Administrator.

Production

Production has increased steadily since the inception of this company, the gold recovery plant having been modified and expanded from time to time . Oaklay's Reef, Middle Reef, Zone I Reef, Village Reef, Strike Reef and Prospect Reef—these are the six reefs which are being actively worked at present, through three major shafts *viz.*, Mallappa Shaft, Central Shaft and Village Shaft, each of which is about 550 metres in depth. The main mine (Main Reef), which was extensively worked in previous years and from which almost all the gold production during previous mining operations came, is now water-logged. It can be re-opened only after de-watering and reclamation. This is rather a major operation requiring considerable amount of money and time. It is expected that it will be re-equipped and re-opened in course of time.

During the first six years after the formation of the company, a total quantity of 55.116 ounces of gold, valued approximately at Rs. 1.38 crores, at an average rate of Rs. 250 per ounce, was recovered. A pilot plant was set up and the crushing was commenced in the month of September 1948. It was replaced by the main mill in November 1949. A cyanidation plant was put up in August 1950, for recovering gold from the tailings. Later, the

capacity of the mill was increased to 300 tons a day from 150 tons a day.

A total quantity of 97,186 ounces of gold, valued approximately at Rs. 2.91 crores, at an average rate of Rs. 300 per ounce, had been recovered during the next six years ending with 1959-60. In 1960-61, the recovery of gold was 21,098 ounces, the value estimated being Rs. 78.48 lakhs at Rs. 372 per ounce. The total production of ore from the Hutti Mines since September 1948, until December 1968, has been 16,86,011 tons, which yielded 3,71,390 ounces of gold at a recovery grade of 4.41 dwts/ton* and a feed grade of 4.79 dwts/ton.

In addition, 54,872 tons of old tailings yielded 3,622 ounces of gold making a total return of 3,75,012 ounces. The current rate of production of ore is approximately 400 tons per working day, yielding approximately 2,500 ounces of gold a month, at an average recovery grade of 5.00 dwts/ton. Annual productions of gold and other metals—silver and copper (i.e., metals produced along with gold)—at the Hutti Mines from the year 1953-54 to 1967-68 are indicated in Table I appended at the end of the chapter.

Ore reserves

The original estimate, worked out in the month of May 1948, of ore reserves of 194,536 tons of quartz, with an average recovery of 4.54 dwts. of gold per ton, was revised to 4,11,635 tons of proved reserves of ore of an average recovery of 4.97 dwts. of gold per ton at the end of September 1961, and the latest estimate (March 1968) has put the ore reserves at 9,53,326 tons of 5.80 grade, which is quite encouraging. On Strike Reef, the development between the 1,300 and 1,500 levels added 40,214 tons at 9.76 dwts/ton to the proved ore reserves. The extensive development carried out on Oaklay's Reef, mainly at the 1,400 and 1,500 levels has resulted in the addition of 62 276 tons at a grade of 6.48 dwts. ton; 5,030 tons of high grade ore (9.28 dwts/ton) have been also added from the Middle Reef.

Year-wise estimated figures of ore reserves

Year ending with	*Tons*	*Grade*
30th September 1951	1,28,502	5.32
30th September 1952	1,55,372	5.39
30th September 1953	1,84,296	5.48
30th September 1954	1,07,377	5.82
30th September 1955	95,762	5.77
30th September 1956	84,303	5.42
30th September 1957	1,05,984	4.91
30th September 1958	1,40,923	4.94

*dwts/ton = dwts. of gold per ton (of ore).

Year ending with	*Tons*	*Grade*
30th September 1959	2,21,005	4.70
30th September 1960	2,90,315	4.90
30th September 1961	4,11,635	4.97
30th September 1962	5,98,307	5.69
30th September 1963	6,67,267	5.61
31st March 1964	6,98,995	5.54
31st March 1965	7,36,683	5.43
31st March 1966	7,62,233	5.45
31st March 1967	8,46,975	5.68
31st March 1968	9,53,326	5.80

The above estimates of proved reserves are on the conservative side, being based on very strict requirements, but a better appreciation of the total amount of ore that can be mined can be obtained from the fact that during the past 20 years, over 50 per cent of the tonnage of mine ore, other than from development (*i.e.*, ore from stopes or production areas), has been obtained from outside the reserves. As a rough guide, therefore, it may be assumed that for every ton of payable ore reserves calculated as definitely proved, at least one additional ton of payable ore will also be available from outside reserves, although such tonnages cannot be calculated in the normal manner or with any degree of accuracy. The substantial increase in the ore reserves since 1956 is the result of increased development footage achieved. This has to be further increased by exploration and development schemes.

Working results

These mines had their ups and downs in the past but have now turned the corner. There has been a gradual improvement in the output of gold. The company has succeeded in making this risky venture a profitable industry. The following table and also tables II and III appended at the end of the chapter throw some light on the working results of this venture :—

Particulars of tonnage treated and gold recovered at the Hutti Gold Mines

Year	*Tonnage treated*	*Fine ounces of gold recovered*	*Recovery grade dwts/ton*
1	2	3	4
1948–49	4,315	2,457	11.83
1949–50	29,235	6,482	4.43
1950–51	31,903	9,079	5.69
1951–52	38,556	9,682	5.02
1952–53	46,755	10,488	4.48
1953–54	68,344	16,928	4.95

1	2	3	4
1954–55	82,804	17,493	4.23
1955–56	83,343	18,099	4.34
1956–57	90,052*	16,144	3.73
1957–58	92,579††	14,160	3.06
1958–59	93,353**	15,248	3.37
1959–60	1,05,638†	16,041	3.05
1960–61	1,15,209	21,098	3.66
1961–62	1,21,777	25,113	4.12
1962–63	1,21,443$	28,986	4.79
1963–64 (Half year ended 31-3-1964)	58,564	13,41	4.69
1964–65	1,13,613$$	25,323	4.68
1965–66	1,15,926‡	26,765	5.70
1966–67	1,17,768	29,607	5.03
1967–68	1,19,698	29,608	4.95

* Includes 6,274 tons of old company tailings re-treated.
†† Includes 7,085 tons of old company tailings re-treated.
** Includes 4,969 tons of old company tailings re-treated.
† Includes 523 tons of old company tailings re-treated.
$ Includes 717 tons of old company tailings re-treated.
$$ Includes 7,952 tons of old company tailings re-treated.
‡ Includes 27,352 tons of old company tailings re-treated.

Exploration

Of the seven known reefs in the region, four have not been developed below 1,500 feet from surface and three below 1,000 feet. An extension of reef, which is known to have a length of 4,000 feet on surface, south of the present workings, has not yet been explored. The main mine, which was worked by the previous company to a depth of 3,500 feet and which remains to be de-watered and re-claimed, holds possibilities of payable ore reserves within the areas developed by the old company. In addition, extensions are known to exist to north and south which have not yet been explored. There are good prospects of discovering further ore on these extensions. The Hutti Mines, although of lower average grade, have geological conditions similar to those of the Kolar Gold Fields where the continuity of payable gold-bearing reefs has been proved for a depth of more than 10,000 feet.

Though gold occurs chiefly in the fissure-filled quartz veins (known as reefs), its deposition may extend several feet to the country rock on both sides of the reefs. This whole zone of

mineralisation is called 'lode matter'. The width of this lode matter exceeds, in some places, 100 feet. The distribution of gold within the reef is often erratic, which makes it difficult to include all the ore in the proved ore reserves. Although these wide mineralised zones of country rock usually show lower proportion of gold contents, they contain large quantities of payable ore. To-date, nearly all development rock, much of which was of very low grade, 2 dwts/ton or less (3.43 gms./M. tonnes or less), has been treated in the recovery plant and the grade of ore has averaged 4.92 dwts./ton (7.51 gms./M. tonnes) over twenty years of operation. To maintain the minimum payable grade of ore, it has been found necessary to mine and blend the higher grade portions in reserve. Development has confirmed the overall low-grade nature of the reefs as shown by the following table :—

Statement showing the different grades of ore reserves in the Hutti Gold Mines

Year		Total feet	Unpayable below 2 dwts/ton		Payable Low Grade 2—4 dwts/ton		Medium Grade 4—6 dwts/ton		High Grade 6—10 dwts/ton		over 10 dwts/ton	
			ft.	%	ft.	%	ft.	%	ft.	%	ft.	%
1950—51	..	3,149	1,171	37	994	32	303	10	134	4	547	17
1951—52	..	3,484	1,070	30	1,071	31	1,072	31	175	5	96	3
1952—53	..	3,956	1,934	49	955	24	509	13	274	7	284	7
1953—54	..	6,003	2,780	46	2,165	36	320	5	472	8	266	5
1954—55	..	6,565	3,997	60	1,420	22	503	8	456	7	189	3
1955—56	..	5,677	3,381	60	1,321	23	578	10	262	5	135	2
1956—57	..	6,952	4,660	67	1,120	16	335	5	494	7	343	5
1957—58	..	14,583	9,744	67	2,427	17	1,116	7	705	5	591	4
1958—59	..	15,553	11,056	71	2,420	16	622	4	702	4	753	5
1959—60	..	13,852	10,320	75	1,552	11	751	5	473	3	756	6
1960—61	..	17,185	10,780	63	2,844	16	1,410	8	1,167	7	984	6
1961—62	..	15,320	9,190	60	2,319	15	1,112	7	965	6	1,734	12
1962—63	..	10,620	5,663	53	2,261	21	08	8	886	8	1,002	10
1963—64 (1/2 year)	..	7,016	3,590	51	1,396	20	718	10	666	10	646	9
1964—65	..	8,774	3,907	45	2,618	30	1,102	12	713	8	434	5
1965—66	..	8,056	4,098	51	1,746	22	884	11	490	6	838	10
1966—67	..	13,471	6,739	50	2,980	22	1,009	8	934	7	1,809	13
1967—68	..	13,490	6,625	49	3,450	26	1,130	8	1,007	7	1,278	10
Total	..	1,73,706	1,00,705	58	35,059	20	14,282	9	10,975	6	12,685	7

Development Schemes

Recommendations were made to the Planning Commission in 1955 for a development scheme under the Second Five-Year Plan, designed to prove the existence of sufficient ore reserves at Hutti to warrant the erection of a treatment plant capable of handling 1.000 tons of ore per day, as that would allow the mines to be put on a really profitable basis by distributing overhead charges over a large tonnage, thereby reducing working costs, while, at the same time, exploiting the low grade reserves to the maximum and giving the mines a long working life.

There are large quantities of low grade ore at Hutti, much of which could not be worked, as the low content of gold was insufficient to cover the cost of mining and treatment on a small scale. The existing treatment plant is limited to 400 tons per day. The ultimate object is, therefore, to increase production from 400 to 1,000 tons per day, thus very considerably reducing the cost per ton so that even this low grade ore is profitably worked. The scheme consisted of two stages. The first stage was to explore and develop the reefs as quickly as possible by increasing the annual development footage to 15,000 feet. It was impossible to say what the results would be, but the chances were good and the expenditure was warranted. As confidently expected, the development scheme resulted in the proving of sufficient ore reserves to justify the production of 1.000 tons of ore per day, and a decision was taken in 1963 to proceed with the second part of the expansion scheme.

The first part of the scheme was drawn up to cover seven years as recommended by the Planning Commission and the expenditure, year by year, was as given below :—

Year		*Expenditure in lakhs of Rs.*
1957-58	..	14.00
1958-59	..	17.00
1959-60	..	18.50
1960-61	..	20.00
1961-62	..	25.00
1962-63	..	17.00
1963-64	..	4.00
Total	..	115.50

The scheme provided for a minimum total of 43,000 feet (say eight miles) of exploratory development (excluding normal mine development amounting to about 36,000 feet) during the seven years. This covered the underground exploration of all the known reefs over their then known length, and to a depth of about

1,500 feet or about twice the average working depth of the mines in 1957. A new and valuable reef was found during February 1958 by underground development and has since been under active exploration.

The following table gives the yearwise details of development from 1953-54 to 1967-68 :—

Year	*On reef feet*	*Off reef shafts, etc.*	*Total feet*
1953-54	6,003	336	6,339
1954-55	6,565	953	7,518
1955-56	5,677	535	6,212
1956-57	6,952	784	7,736
1957-58	14,583	794	15,377
1958-59	15,553	1,808	17,361
1959-60	13,852	3,039	16,891
1960-61	17,185	2,779	19,964
1961-62	15,320	2,672	17,992
1962-63 (1/2 year)	10,620	2,532	13,152
1963-64	7,016	701	7,717
1964-65	8,774	1,616	10,390
1965-66	8,056	2,195	10,251
1966-67	13,471	1,439	14,910
1967-68	13,490	1,544	15,034

The cost of production, excluding depreciation and interest on loans and royalty, at production of 1,000 tons a day, has been estimated and is given below along with the actual cost of 1966-67 and 1967-68 :—

Particulars	1966-67	1967-68	At 1,000 tons a day
Tons treated per month (Mine ore only).	9,814	9,975	26,000
Working cost per ton— (in Rs.)	74.3	84.70	62.50
Working cost in terms of dwts/ton at current gold price (average for year).	3.36 (Rs. 14.25 per gm.)	3.46 (Rs. 15.6 per gm.)	2.50 (Rs. 16.8 per gm.)

It can thus be seen that it would be possible to mine and treat ore of a grade of nearly one dwt/ton less than that of the present grade without incurring losses, which is a very important

factor in the profitable working of a low-grade mine such as Hutti. A major benefit will be in the form of steady employment to a large number of persons for a considerable number of years, thus contributing to an improvement of the economy of the district. The scheme includes a new crushing plant and gold recovery plant for treating 910 metric tons per day and procurement and erection of new electric hoists, new headgears etc., and development of mines at different depths. It also provides for the construction of a large number of residential quarters for officials and employees. More than 75 per cent of the work under the scheme has been completed. The rest will be completed soon.

Employment

The gold mining industry is providing employment to about 2,500 people and disbursed about Rs. 59 lakhs as wages in 1967-68. The number has gone up to 2,685 as per the figures for the end of June 1969, among whom there were 2,556 men and 129 women. Since 1948, when there were 689 employees, the number has been steadily rising. The year-wise particulars relating to the number of employees and wages paid are as given below :—

Year	*No. of Employees*	*Wages paid* (in Rs.)
1952—53	1,384	12,38,000
1953—54	1,242	14,36,000
1954—55	1,304	15,60,000
1955—56	1,496	16,66,000
1956—57	1,548	17,76,000
1957—58	1,530	16,90,000
1958—59	1,800	17,30,000
1959—60	1,890	20,30,000
1960—61	2,150	25,00,000
1961—62	2,380	29,40,000
1962—63	2,220	33,90,000
1963—64	2,260	18,30,000
1964—65	1,950	32,90,000
1965—66	2,330	37,20,000
1966—67	2,370	47,20,000
1967—68	2,420	59,25,000

Welfare amenities

Various welfare amenities have been provided by the company for its employees. About 1,200 quarters have been built as per the design approved by the Government, under a subsidised housing scheme. Rent charges vary from 64 paise to Rs. 1.50 per month depending upon the type of quarters for daily paid employees. The rent charged for the monthly-paid employees is also very low. Over 1,600 employees have been provided with quarters. Sanitation and housing facilities are looked after by a Sanitary and Housing Officer.

The company is maintaining a well-equipped hospital, with three qualified medical officers, a matron, nurses and other necessary staff. The average number of out-patients seeking medical aid in this hospital is about 350. Among out-patients treated, about 70 per cent are outsiders (*i.e.*, those who are not employed in the mines) from neighbouring villages. There are 27 beds in the male ward, ten beds in the female ward, four beds in the maternity ward and six beds in the isolation ward. Eye patients are treated at the air-conditioned mobile hospital of the Holston Hospital, Yadgir, which frequently visits Hutti.

Periodical mass vaccination and inoculation work against small-pox, cholera, etc., is carried out among employees and the general public. The total annual expenditure now on these medical facilities is stated to be about Rs. 1.25 lakhs. About 1,90,000 gallons per day of filtered and chlorinated drinking water are supplied from the Krishna river. A school building and quarters for the teachers have also been provided by the company. A co-operative store is run by the employees for making available provisions, tinned stuff, cloth, shoes, etc. The company, apart from holding shares in this society, has provided a large rent-free building for the store. The co-operative store is running also a flour mill and an aerated water factory. The company is supplying rice, wheat and jowar to the employees at subsidised rates. There is a fully equipped 'C' type creche provided by the company. There are free weekly cinema shows, reading room and library, parks and facilities for indoor and outdoor games for the benefit of the employees.

Other Gold Mines

Kodini Mines.—This mining block lies about four miles north-east of Hutti. It is stated that the results of investigations here were rather disappointing on the whole. The auriferous reef here was found to be narrow.

Uti (Ootoo) Mines.—The reef in this mine lies about four to five miles north-east of Wandalli. The average assay value in most of the portions here was found to be too low for working the reef profitably.

Maski Mines.—The ancient miners seem to have paid great attention to this block, which lies about 15 miles due south of Hutti. There are two prominent lines of old workings distributed in the Maski and the Udbal village lands. A shaft sunk on one of the large old workings in Maski village showed varying values in depth ranging from two to twelve dwts. of gold per ton. The reasons as to why the work in the mine was discontinued in spite of the good results are not yet known.

Udbal Mines.—This block lies about four miles east-south-east of Maski. The report available on the workings in the mine is

not clear as to the depth to which the mine had reached. A quartz reef, discovered by chance, when a well was being dug, had yielded, on assaying, a value of an ounce of gold per ton.

Hunkuni Workings.—There are six adjacent old workings near Hunkuni, about three miles south-east of Deodurg. These old workings were discovered by Captain L. Munn in 1905. He considered this mine by far the biggest old working. It had been left untouched by the Deccan Mining Company and he recommended that it deserved a careful investigation.

Salar Jung Sugar Mills

The sugar mills at Munirabad, which is a large-scale industry in the district, owes its origin to the imagination and sagacity of a group of entrepreneurs of the area headed by Sri S. A. Agadi of Koppal and the encouragement given by Nawab Salar Jung. They thought that it would be a great boon to the area if the waters of the Tungabhadra could be utilised, using the irrigation facilities provided by the Vijayanagara canals, for extensive cultivation of sugarcane so that a large-scale sugar factory could be started. An extent of land of about 3,720 acres in Koppal taluk was obtained for this purpose from Nawab Salar Jung, the Jagirdar of Koppal. The Salar Jung Sugar Mills, named after him, with its registered office at Hyderabad and with Messrs. Agadi and Company as its Managing Agents, came into being as a limited company, in April 1944. The authorised capital of the company, at the time of its inception, was Rs. 50,00,000 (O.S.) with an issued and subscribed capital of Rs. 40 lakhs (O.S.) comprising 80,000 shares. As importation of new machinery from abroad was not possible at the time, a second hand machinery, with a crushing capacity of 250 tons, was installed at Munirabad for manufacturing white sugar.

The sugar factory at Munirabad is ideally located, being connected to important places of the district by road and being connected to Hubli, Hospet and Bellary by rail. Situated on the Hubli-Guntakal metre gauge railway line, it is just 8 km. away from Hospet, an important trade and industrial centre. The climate of the place is salubrious and the places round about have perennial source of water for irrigation. This pioneering venture proved to be the beginning of development of the area into an industrial complex, providing opportunities to the people round about to widen their sphere of agricultural and industrial activities and to enable them to earn more. Later, the management of the company was transferred to a group of entrepreneurs of Hyderabad.

Unfortunately, the sugar mills suffered damage at the hands of the Razakars who looted it prior to the Police Action in 1948. During 1953, the share capital of the company was reduced to Rs. 7,20,000 (80,000 shares of Rs. 9 each). The authorised capital

also was reduced to Rs. 45 lakhs divided into five lakh ordinary shares of Rs. 9 each and the company came to be a subsidiary of Messrs. India Sugars and Refineries Limited, Hospet. The then existing Managing Agency system was terminated with this change and the management of the company came under the control of a Board of Directors. The share capital of the company has now been increased to Rs. 50 lakhs by capitalising Rs. five lakhs out of the general reserves and thereby increasing the nominal value of each share from Rs. 9 to Rs. 10. During the season of 1952, a quantity of 350 tons of white sugar was produced. The production continued against heavy odds and it was necessary to improve the working of the plant and to effect substantial expansion. The company secured the required machinery of a crushing capacity of 700 tons, on lease from its holding company, M/s. India Sugars and Refineries Limited, Hospet. The new machinery was installed in 1956. The mill was able to crush about 550 to 600 tons of sugarcane per day thereafter. But even this was not enough to make it a fully economic unit. And so, further expansion was envisaged and an industrial licence was obtained in 1960 for raising the crushing capacity to 1,000 tons per day. The Mysore State Financial Corporation sanctioned a loan of Rs. 20 lakhs for the purpose. As a result of expansion and increased efficiency of the plant, the company's working results underwent a change for the better and it has been able to earn profits. During the season from November 1967 to February 1968, the mill crushed 76,845 tons of sugarcane and produced 7,887 tons of sugar at an average recovery of 10.33 per cent.

The company handed over to the Government of Hyderabad 2,224 acres of land, out of the lands given by the late Sir Salar Jung Bahadur, for rehabilitation purposes. The present holding of the company is about 1,500 acres, consisting of about 780 acres wet land and the rest dry. Most of these lands had been lying fallow for a long time and had been leased out to M/s. ISA Farms Private Limited, for reclaiming the barren and rugged terrain. These lands were taken over by the company in October 1962 and intensive cultivation, with proper supervision, has been taken up to ensure maximum yield from them. Approach roads, causeways and bridges have been constructed to enable easy vehicular traffic so that fresh and timely supplies of sugarcane are ensured. About 650-700 acres are being utilised for sugarcane cultivation. The company has a scheme for sinking bore wells at suitable points in the dry area. It is also advancing loans to cultivators for installing pumpsets, digging of wells, etc. Besides, with the implementation of the Tungabhadra Project, large tracts of land in the area have been brought under irrigation. About 5,500 acres of land are reserved for sugarcane cultivation. Although the per-acre yield is not yet commendable at present, it is expected that with mechanised and improved methods of cultivation and adequate inputs, the yield would be improved.

Labour welfare measures

About 80 single-room tenements have been constructed for the workers of the mills under an Industrial Housing Scheme. Residential quarters have been provided to the staff. There are a dispensary, a recreation club and a consumers co-operative society for the benefit of the employees and also a building for the workers' union. A school building has been also constructed in the colony. Sports activities are also encouraged by the management of the factory.

Tungabhadra Pulp and Board Mills

Being predominantly an agricultural area, the important raw-material required for the manufacture of straw boards is available in plenty at Munirabad. The Tungabhadra Pulp and Board Mills Limited was established at Munirabad for the manufacture of straw boards, with an initial production capacity of ten tonnes per day, utilising paddy straw as the raw-material. This is a limited concern managed by a Board of Directors. The authorised capital of the company at the time of its inception was Rs. 16 lakhs, divided into 16,000 ordinary shares of Rs. 100 each. This has been recently increased to Rs. 25 lakhs by issuing further shares, all of which have been subscribed by M/s. Salar Jung Sugar Mills Limited, Munirabad.

That this industrial unit has had rather a chequered career is evident from the 28th annual report of the company for the year ended on 31st March 1968. The report says—"The year's working, as you would observe, has resulted into a loss of Rs. 8,10,301 after providing for depreciation amounting to Rs. 97,333 and development rebate reserve of Rs. 36,000. The total accumulated loss of Rs. 38,24,567 upto the end of the year is carried forward to the next year. Your Directors had reported to you last year that the factory had to be closed down on 27th April 1967, in view of its uneconomical working continuously for the last three years. Therefore, during the year under report, the factory had hardly worked for 27 days and 143 M. tons of goods were only produced." It was stated that the income from sales during the year 1967-68 amounted to Rs. 6.87 lakhs only, as against Rs. 23.51 lakhs of the previous year.

During 1968, M/s. Salar Jung Sugar Mills Limited, Munirabad, became the holding company and the Tungabhadra Pulp and Board Mills, a subsidiary company. Now the factory has been showing signs of recovery and stability. Previously, only straw boards were manufactured, but now the production has been diversified and different types of boards are being manufactured. Wrapping paper, which is used as corrugation media, for which the company anticipates a good demand, is also being now produced in the factory. Additions have been made to the plant to step up the capacity of the unit. Efforts are being made to improve the efficiency of the mills and to step up the sales and it

is expected that the factory would soon be able to run with good returns on the investment.

Chemicals and Fertilisers

The Chamundi Chemicals and Fertilisers Ltd., is another big industrial unit of the district. This factory is also located at Munirabad with its registered office at Mysore. It has a licensed capacity of 16,500 tons of sulphuric acid and 40,000 tons of superphosphate per annum. The company came into existence in 1961. The subscribed capital of the company is Rs. 40,00,000, the authorised capital being Rs. 1,25,00,000.

Commercial grade sulphuric acid is produced from sulphur, while superphosphate is produced from rockphosphate. Both sulphur and rockphosphate are imported, the former from America and the latter from African countries.

According to the fifth annual report of the company, *i.e.*, for the year ended on 31st December 1965, 18,681 tonnes of superphosphate were produced during the year. Due to foreign exchange difficulties, sufficient quantities of raw materials were not allotted and due to the non-availability of the raw materials, the factory had to stop production for more than 200 days during the year. The production for the year 1966 (till the end of May, 1966) was about 12,000 tonnes of superphosphate. The annual requirements of imported raw materials were placed at 6,000 tonnes of sulphur and 60,000 tonnes of rock-phosphate.

The profits earned by the company during the year 1964-65 was Rs. 2,70,768, without taking into account the depreciation charges. The company has organised a net-work of 20 depots for sales promotion in association with the Coorg and Mysore Coffee Works Limited. The sales officers are agricultural graduates. It appears that because of the accumulated heavy stock of the products of the factory, production has been stopped for sometime now.

Faruk Anvar Oil Mills

Raichur district is quite rich in oil-seeds, and so, there is good scope for vegetable oil industry. Messrs. Faruk Anvar Company's oil mills which was established in 1944-45 at Raichur started crushing groundnut seeds with modern expellers. The crushing capacity of the Mills, which was only 50 tons per day in the beginning, was gradually raised to 125 tons per day. Later, the Company wanted to start solvent extraction industry also, utilising the oilcakes obtained from the expellers. After obtaining the licence, an automatic extraction plant (made in Belgium) was installed. This plant was commissioned in the year 1962. The total investment on this most modern plant was about Rs. 25 lakhs. This industrial unit is said to be one of the biggest units of its kind in South India.

The de-oiled cakes obtained from the plant are an excellent manure and there is a great demand for them abroad. Most of the production is exported, either directly or through agents, to foreign countries like the United Kingdom, Russia, Japan and the Continent. Groundnut being a seasonal crop, during the summer months and after *Diwali* the production in the Mills is at its peak. There are about 130 workers employed in the factory. It has a fleet of six lorries to transport raw materials and finished goods. It has also two bore wells which supply water to the plant. The firm has maintained a workshop of its own and has also got a moulding shop.

The Company decided to set up also a Vegetable Oil Refinery to produce 20 tons of fully refined vegetable oil per day. The erection of this automatic refining plant has started and it is expected to go into production in the early part of 1970.

Co-operative Spinning Mill

There will soon be an important addition to the number of industries in the district. A Spinning Mill, in the co-operative sector, is expected to go into production by the end of 1969-70. The Co-operative Spinning Mill Ltd., Raichur, which was registered in 1961, has been licensed to spin 20s and 26s counts of yarn with 12,000 spindles.

This is mainly a cotton-growers' co-operative spinning mill, established with the objective of utilising the local cotton. Most of the shareholders are cotton-growers. This industry will help diversify the economy of the region. This major co-operative endeavour will benefit not only the cotton-growers, but also the handloom-weavers. A large area is under cotton cultivation in Raichur district and the total acreage is placed at about 6,76,500. New and improved varieties are being grown. A comprehensive cotton development scheme has also been introduced. There is also a large number of handloom-weavers. At present, the entire requirement of yarn is being met from mills situated at Adoni, Sholapur and other places. Therefore, a spinning mill in Raichur district is a long-felt need.

The authorised capital of the co-operative society is Rs. 50 lakhs. The particulars relating to the subscribed capital and paid-up capital are as follows :—

No. of shares	*No. of members*		*Subscribed capital*	*Paid-up capital*
1	2		3	4
			Rs.	Rs.
92	25	Weavers' Co-operative Societies.	4,600	4,600
3,797	441	other Co-operative Societies.	3,97,650	3,97,646

1	2	3	4
		Rs.	Rs.
2,532	2,232 Individual Members	3,79,800	3,79,795
1,000	Government of Mysore	20,000	10,00,000
1,275	Apex and Co-operative Central Banks ..	2,55,000	2,55,000
	Total ..	30,37,050	20,37,041

This is a capital-intensive project and the estimated total cost is about Rs. 93 lakhs. The society has approached the Industrial Finance Corporation of India for a loan of Rs. 50 lakhs.

The total output per year is expected to be about 8,054 bales of 400 lbs. each. The particulars of expected annual (300 working days) production of yarn of each count in this mill and its value are as follows :—

Count		*Production in bales*	*Value in Rs.*
20s		4,981	59,77,000
26s		3,073	42 10,000
	Total ..	8,054	1,01,87,000

As an incentive to the cotton-growers, it is proposed to distribute the part of the profits among them, by amending the bylaws of the society. Due to the increase in the numbers of power-looms and ordinary looms, the demand for yarn is expected to increase. It is also proposed to make provision for the payment of rebate to weavers' co-operative societies on the purchase of yarn from this mill.

Cotton Ginning

Cotton pressing and ginning is by far the most prominent industry of this district. The cultivation of cotton on an extensive scale, especially of foreign varieties, has given rise to the pressing and ginning industry. In the modern period, it had its beginning in 1870s. The settlement report of Raichur taluk, prepared in the year 1889, says—" There are two press houses in Raichore—one belonging to Messrs. Harvey & Co., and the other to Sabapathy and Co ; the former was built by Messrs. Dymes and Co., in 1871 at a cost of Rs. 35,000, the building itself and the machinery about 25,000 ; this building was subsequently sold in 1882 to a joint stock company, under the name of Rippon Press Company ; the daily pressing of cotton bales is from 70 to 100 bales, each bale weighing 392 lbs. The coolies employed in

the establishment are from 60 to 80 hands, both men and women, and their daily wages vary from two annas to five annas, according to the quality of work done by them. The quantity of cotton pressed last year is about 5,000 bales and the charges for pressing is Rs. 4-8-0 a bale. The full working season is from May to September ....

"Messrs. Sabapathy and Co.'s Press was built in 1878 at a cost of Rs. 35,000; the quantity of cotton pressed last year amounted to 8,745 bales of 400 lbs. each; out of this, 6,063 bales were their own and the rest outsiders'."

According to the Imperial Gazetteer of India (1909), there were three cotton presses at Raichur in 1901.

Prior to the introduction of ginning machines, manual labour was employed for ginning cotton. Cotton was spread on mats and beaten with sticks to remove the dirt and to loosen it. Then it was spread on a stone slab and rolled by a thick iron roller up and down by feet. This separated the seeds from the cotton. Ginning wheels were also used on an extensive scale. Both these methods continued in rural areas even after the introduction of ginning machines. But this was a very slow and laborious process. The first ginning factory was started at Raichur in 1915 under the name Rippon Ginning Factory (the present Umamaheshwar Ginning and Pressing Factory, Raichur).

The First World War gave an incentive to the development of the industry and this period recorded an increase in the number of ginning and pressing factories. The pace of expansion was retarded after 1925 and the depression that set in about this time was perhaps responsible for this. The period of the Second World War witnessed an increase in the number of such enterprises as a result of increase in demand and high prices of cotton during that period. The total number of ginning factories at present in the district is 159, whereas the number was only 93 in 1959. The distribution of these factories over different places of the district is indicated below:—

Taluk	*No. of factories in*		*Total number of gins in*	
	1959	1969	1959	1969
1	2	3	4	5
Raichur town ..	10	18	195	247
Raichur taluk (places other than the town area).	5	11	32	48
Deodurg taluk ..	3	13	26	64

1		2	3	4	5
Manvi	..	10	30	53	119
Lingsugur	..	15	26	66	112
Sindhanur	..	12	18	82	108
Kushtagi	..	7	9	35	43
Gangavati	..	11	7	72	72
Koppal	..	9	11	41	47
Yelburga	..	11	16	32	49
Total	..	93	159	633	909

The tools and equipment required in this industry consist of steam or oil engine, boilers, single roller or double roller gins, cotton operators, drilling machines, high pressure and low pressure cotton presses, etc. A majority of ginning factories are run by electric power. Steam engines are used in the big factories. Double roller ginning machines have been mostly used in these factories. The total number of gins in the 159 factories in the district is 909, eighteen large units in Raichur town alone having 247 gins. The remaining gins are in factories scattered over the other parts of the district. The cotton pressing factories use hydraulic presses and steam engines. There are at present seven such pressing factories at Raichur and one at Koppal.

Ginning begins during the harvesting season, from the middle of February, and it continues till the month of June. During the busy season, all the factories work to capacity and in the remaining period, some of them are kept idle. The industry is mainly seasonal in character, and so the employment in factories is also seasonal. The source of labour supply in urban areas is the town itself in which the factories are situated, and in the rural areas labour is recruited from the villages nearby. Workers are employed on both piece-wage and time-wage basis. The types of workers employed in the factories are gin feeders, coolies and lashers. Women are also employed as feeders and cleaners.

Besides these workers, engineers, firemen, engine drivers, oilmen and carpenters are also employed. The number of workers employed in all these factories is about 3,000. It is estimated that about 1,000 to 1,500 additional persons are employed in the ginning and pressing factories during the busy season. The usual wages paid are Rs. 3 for men and about Rs. 1-50 for women.

Raichur being an important cotton growing district, about 14,000 to 16,000 bales of cotton are pressed every year. Due to failure of the crop in 1965, only 8,892 bales were pressed in that

year. The years 1966 and 1967 saw an increase in the quantity of cotton pressed, which stood at 14,800 and 16,762 bales, respectively. During 1968, 12,006 bales (400 lbs.=one bale) of cotton were pressed in the factories of the district. Rates for cotton ginning vary from place to place. Generally, it is Rs. 11-50 per quintal. The pressing rates charged are Rs. 4-75 for the same quantity. A notable feature of the pressing factories in Raichur district is that they have formed a pool to share profits. This has eliminated unhealthy competition among the different units. The cotton trade is in the hands of big merchants who are mostly Marwaris. They get adequate credit facilities from the scheduled banks. The merchants have trade connections with merchants and owners of textile mills at Bombay, Sholapur, Ahmedabad and such other places. Bullock carts and motor trucks are the means of transport of cotton within the district. The entire quantity of cotton ginned and pressed is exported outside the district from Raichur and to a certain extent from Koppal. The availability of long staple cotton and power facilities are the favourable factors of growth of this industry. The industry has a good future in the district as cotton production is expected to increase considerably with the availability of more and more irrigational facilities under the Tungabhadra Project.

Oil Mill Industry

The vegetable oil industry is also fairly old in this district. Prior to the establishment of oil mills, oil was produced by means of village *gharas*. At first, the progress was slow on account of depression. During the Second World War and the post-war period, when the demand for groundnut oil increased considerably for manufacturing Vanaspati ghee (hydrogenated oil), the oil mill industry in the district made a rapid progress. Oil mills with rotary *ghanas* as well as with expellers were started. Oil expellers were installed only in the mills at Raichur and Koppal. Rotary *ghanas* were, however, scattered throughout the district. There are at present 62 *ghanas* in about ten units.

There are altogether 40 oil mills with expellers of standard size in the district. Out of these, 18 mills are located at Raichur, 18 at Koppal and two each at Yelburga and Gangavati. The largest among these consists of 17 expellers and the smallest consists of two expellers. It is estimated that the amount invested on a single expeller ranges between Rs. 10,000 and Rs. 15,000. The machines used in the vegetable oil industry are steam engines, boilers, expellers, rotary machines, filter presses and decorticators. The expellers and their spare parts are not manufactured within the district. However, some of the oil mills maintain small foundries and get simple expeller parts made at the factories themselves.

The production of groundnut oil and oil-cakes in the oil mills has increased from 19,679 tons in 1954-55 to 35,014 tons in

1957-58 and the oil extracted increased from 8,007 tons to 15,156 tons during the same period. The production of oilcake stood at 19,273 tons in 1957-58, whereas it was 10,525 tons in 1954-55.

During the period from 1963 to 1968, the average quantity of kernel crushed stood at 35,000 metric tons per year, and the oil extracted was 15,000 metric tons per year, the figure for oilcake production being 15,000 metric tons per year.

Decortication

The decortication of groundnut is a small-scale industry recently developed in this district. Decorticators were introduced, for the first time, after the period of depression during 1930s. The availability of abundant oilseeds in the district led to a great expansion of this industry and during 1941, there were 86 decortication machines attached to different oil mills and ginning factories. It is now estimated that there are about 100 such decorticators in about 75 factories and industrial establishments. Decortication is a seasonal industry working from March to September after the harvest of groundnuts. The tools and implements used are oil engines, steam engines, electric motors and rollers. Automatic feeding machines are also used. Coal and groundnut husk are the chief sources of fuel. Engineers, firemen, engine drivers, valvemen and labourers are required for this industry. Women are also employed.

Cotton-seed oil

The abundance of cotton, and therefore, of cotton-seeds, has given rise, in recent years, to the manufacture of refined cotton-seed oil, decorticated cotton cakes, hulls, soaps, etc. A few factories of this type are working at Raichur. Here the cotton-seeds are first cleaned and stones, mud, cotton bolls, etc., are separated. The cleaned cotton seeds are decorticated in specially designed decortication plants. Decorticated meats are pressed for oil through a battery of expellers. The crude oil is refined in a refinery plant and the soap-stock, which is the bye-product of the refinery, is converted into crude washing soap. The cotton-seed oil is sold mostly to Vanaspati manufacturers of Bombay. Cotton-seed cakes are exported to the United Kingdom and hulls and soaps are sold locally.

Other kinds of oil

Oil-extraction from castor, gingelly and safflower is being done in the district on a cottage industry basis with traditional means like *ghanas*. Castor oil and gingelly oil are being consumed locally. The demand is met, to some extent, by small expellers which have been installed in houses or backyards. The *ghanas* are driven by a pair of bullocks. In some places, *ghanas* of the new Wardha-type have been set up under the Rural Industrialisation Programme and they give an increased yield of oil. Since the production is not adequate, large quantities of these oils are imported from Bombay and elsewhere. No large-scale mills

have been established in Raichur for the extraction of these oils, and the small *ghanas* continue the age-old methods of producing oil. Karadi oil is also produced in a small quantity by these *ghanas* and consumed locally.

R. C. C. Pipes

Reinforced cement concrete pipes are manufactured by Messrs. Indian Hume Pipe Company Ltd., at their factory at Raichur. This factory was established in 1946 with the main object of manufacturing reinforced cement concrete pipes and collars, hume steel pipes and reinforced cement concrete poles. The reinforced cement concrete pipes and collars are manufactured by the centrifugal process. Between 1946 and 1950, production was not much. During 1952-53, production was of the order of Rs. 1,31,996 (O.S.). With the increase in demand for such products, the years after 1953 saw an increase in production. But, however, in 1955, production was again low when compared to previous years, the value being Rs. 1,00,000. There was a gradual increase in production to Rs. 1,50,000 in 1956, to Rs. 2,50,000 in 1957 and to Rs. 2,70,000 in 1958. During 1957, 3,263 pipes and 3,340 collars were produced. During the years 1960 and 1961, Rs. 1,11,000 and Rs. 1,88,000 worth of products were manufactured. The total wages paid to labourers now is estimated at Rs. 3,500 per month and the present production value of the factory is Rs. 50,000 per month. There are about 45 men workers in the factory; besides a few women workers are also employed on daily wage basis. The raw materials required are sand, cement and steel. Sand is obtained locally, cement from Shahabad and steel from the Tatas and Bhadravati. The products manufactured by this factory are now used for water works, drainage, irrigation and other purposes. The construction of culverts and causeways is also made easy by the use of these pipes.

The Raichur district has, since early days, been famous for its village and cottage industries like handloom-weaving, leather-working, salt-making, carpentry, pottery, hand-embroidery and a brief account of these industries is given below.

Handloom-weaving

Handloom-weaving is an important occupation of the rural population in Raichur district. According to the District Statistical Officer, Raichur, there were 2,431 handlooms in the district in 1967. Some of the important centres of handloom weaving are Kinhal, Bhagyanagar, Alawandi, Hoskanakapur, Hosahalli and Gondbal in Koppal taluk, Hanamsagar, Tawargera and Dotihal in Kushtagi taluk, Maski and Mudgal in Lingsugur taluk, Deodurg in Deodurg taluk, Manvi and Sirvar in Manvi taluk, Gangavati in Gangavati taluk, Raichur, Yergera, Gunjahalli Talmari and Idapnur in Raichur taluk and Balganur in Sindhanur taluk. The communities engaged in handloom-weaving

industry include the Devangas, Khatris, Jayandras, Padmasalis, Momins, etc.

Tools and implements

Generally, fly-shuttle pit-looms are used. The antiquated throw-shuttle type of pit-looms are also used to a small extent. Dobbies are used according to the type of weaving. Frame looms, take-up motion attachments and pedal-looms are rare. A warping mill and a small calendering machine were installed at Kinhal. Four pedal-looms, a few frame-looms and take-up motion attachments and lattice dobbies were introduced in the district on a small-scale under the handloom development schemes. Dyeing of yarn is done mostly with synthetic dyes, with simple equipment.

Raw materials

The main raw materials required in the handloom-weaving industry are cotton yarn, art silk and silk for borders, colours and chemicals. Cotton yarn is brought mainly from Bombay and partly from Gadag and Sholapur by wholesale merchants in the district and is distributed among the weavers. The yarn is supplied to the weavers in bundles and knots. Pure silk, which is used especially for borders, is mainly imported from Bombay and Bangalore and art silk from Bangalore, Gadag and Hospet and the chemicals are got from Bombay.

Fabrics produced

The main handloom products of this district are sarees, *choli-khanas* (blouse pieces) and *dhoties* of both coarse and finer counts. Sarees of the Ilkal type of eight or nine yards' length, with a width of 50″, are produced at Hanamsagar, Dotihal and Maski. These sarees are usually produced with three types of borders: *gomei*, *pharaspatti* and *ruiphul*. The first one is a small herring bone stripe, usually of white colour, between two small yellow stripes. There are generally four *gomeis* in one border. In the *pharaspatti* border, three or four lines of *gomei* of plain red colour are arranged with wider space in between. In the *ruiphul* border small flower designs are substituted in white colour for the *gomei*. These sarees generally have an attractive *seragu* or *pallo*. In hand-woven sarees, the width of such *pallos* varies from 18″ to 24″; when woven in solid colour, it is known as *tope padar* and if wavy designs are introduced, it is called *tope-teni padar*. The body designs of the sarees are of different types and are called by different names: *Khadi, Ragavali, Kundichikki, Garuli* and *Chadaranga-chikki* are some of the famous designs and among them the *Chadaranga-chikki* is an expensive variety. Sarees in *Gadidadi* designs are produced in 20s, 40s and 60s counts at Kuknur and Kinhal. Manvi is known for the production of *Mukonch* pattern of sarees of mostly 20s counts. *Gacchidadi* sarees of a very fine quality in cotton, art silk and mixed silk are produced at Kinhal, Gangavati and Tawargera. Besides these, *choli-khanas* of a width ranging between 32″ and 36″, both in spun silk of 80s counts and in silk and cotton mixed, are produced at Bhagyanagar and Hoskanakapur. These *khanas* are called locally *gardthar khanas*. Bhagyanagar

and Hoskanakapur are known also for the production of *dhoties* of 40s to 60s counts and for shirting cloth, both ordinary and mercerised. Gangavati, Maski, Deodurg and Tawargera are equally famous for *dhoties* and shirting cloth. Besides all these, the district is noted for the production of turban cloth. This is produced at Maski, Gangavati and Deodurg and is called *patga, nagar shalla* and *vastar,* respectively, in these three places.

Earnings of weavers

Almost all the weavers possess their own looms and the supply of raw materials like silk and yarn is made to them by local master-weavers or financiers who collect from them the finished products and pay them the weaving charges. Along with the weavers, their family members also work. The preparatory processes like winding, warping and sizing are attended to by women and children. A weaver, who has more than one loom, employs labour in accordance with his needs and pays daily wages. The earnings of handloom-weavers are poor. The rates vary according to the counts of yarn and the type of weaving. For coarse fabrics produced out of 20 counts, the weaving wages are paid at 40 paise per hank of yarn. The rate is 50 paise per hank of 40s. The rate of wages paid to weavers by the handloom weavers' co-operative societies at different places of the district vary from 40 paise to 45 paise. At Hanamsagar, Dotihal, Maski and Tawargera, a sum of Rs. 6-00 to 8-00 is paid as wages for a weaver who weaves a saree of nine yards of Ilkal type with *tope-teni padar*. For an Ilkal saree in *chadaranga-chikki* design, the wages are about Rs. 15-00. At Bhagyanagar, Rs. 20-00 are paid to the weaver for 12 *khana* pieces (6¾ yards) of *gardhar* pattern. Rs. 10 for *dhoties* of nine yards of 60s, Rs. 8-00 for 40s and Rs. 5 per 21 yards of shirting are paid as wages. Compared to the wages paid by the co-operative societies, the wages paid by the master-weavers and *sahukars* are generally on a lower scale. Taking into consideration the working capacity of a weaver, his earnings range between Rs. 60 to Rs. 90 per month. This is low when compared to his hard work.

Marketing

Generally, master-weavers advance loans and raw materials to weavers and collect from them the finished goods. The dependence of weavers on master-weavers for supply of raw materials and sale of finished goods is the main cause of their low earnings. They are heavily indebted to *sahukars* and they are unable to get a fair price for their work.

With the establishment of co-operative societies, a section of the weaver population, however, is benefited with regard to marketing of finished goods. The weavers' co-operative societies, despite difficulties, are trying to promote sales by opening emporia in different places. Such sales emporia have been started at Raichur, Sindhanur, Koppal, Kinhal, Bhagyanagar, Gangavati, Kushtagi, Dotihal, Hanamsagar, Tawargera, Maski, Manvi and Deodurg.

Role of Co-operatives

Efforts have been made in recent years to free the weavers from the clutches of the master-weavers by the establishment of co-operative societies. The first handloom weavers' co-operative society in the district of Raichur was formed at Kinhal during 1949 with a membership of 1,361 persons. It has an area of operation extending to the whole of Koppal and Yelburga taluks. The society started production-*cum*-sales activities as early as 1951 with a special monthly quota of 1,000 lbs. of cotton yarn. Later on other societies were formed at different places. At first, their activities were limited to distribution of cotton yarn among member weavers. Subsequently, with the assistance made available under the handloom development schemes, they took up production and sales activities. There are, at present, 14 handloom weavers' co-operative societies functioning in the district and they are located at Raichur, Manvi, Deodurg, Maski, Tawargera, Dotihal, Hanamsagar, Gangavati, Bhagyanagar, Kinhal and Hoskanakapur. The total number of handloom weavers brought into the co-operative fold so far is about 4,200.

The societies make arrangements for purchase of cotton and silk yarn, dye stuff, etc., for their members. Raw materials are issued to weaver-members and finished goods are collected in return on payment of wages. Every effort is made by the societies to pay fair wages. The weavers' societies are also striving for improvement in working techniques in order to increase the production capacity of weavers and also to improve the quality of handloom products. The grant given by the Department of Industries and Commerce for conversion of throw-shuttle looms into fly-shuttle type of looms were utilised for free supply of fly-shuttle looms to members. Other improved tools and implements, such as take-up motion attachments and frame-looms, were distributed among weavers. Dye-houses were started with better equipment with the assistance given by the Department. Sales emporia were opened at different places to promote sales of handloom cloth by taking advantage of the price-differential. Financial assistance has been given in the form of loans, grants, subsidy, etc., to the industry. Loans and grants have been provided to thirteen different handloom and wool weavers' co-operative societies in the district. The total amount provided as loans and grants from 1954-55 to 1968-69 was Rs. 2,45,625. An amount of Rs. 1,06,500 was disbursed under the Reserve Bank of India Credit Scheme. The Wool Weavers' Co-operative Society, Gondbal, received a loan of Rs. 86,400 towards construction of 24 houses for the wool-weavers. Particulars of loans and grants provided to different weavers' co-operative societies for various purposes are given in table IV appended at the end of the chapter.

One hundred-and-six powerlooms have been sanctioned to seven cotton weavers' co-operative societies in the district. The total loan amount disbursed to these societies hitherto is

Rs. 3,33,887, the total grant being Rs. 13,485. A statement showing the number of powerlooms allotted and financial assistance provided for the purpose to weavers' co-operative societies in Raichur district is given below :—

Sl. No.	*Co-operative Society at*	*No. of powerlooms allotted*	*Total loans*	*Total grants*
			Rs.	Rs.
1.	Raichur ..	12	35,650—00	1,140—00
2.	Dotihal ..	6	22,575—00	1,410—00
3.	Maski ..	25	81,437—50	3,525—00
4.	Bhagyanagar ..	15	58,687—50	4,275—00
5.	Gangavati	11	43,037—50	3,135—00
6.	Kinhal ..	25	62,500—00	—
7.	Deodurg ..	12	30,000—00	—
	Total ..	106	3,33,887—50	13,485—00

Price-differential subsidy

To enable handloom cloth to sell in competition with mill-made cloth, a price-differential subsidy was paid on sales of all varieties of handloom cloth. At first, the rebate was paid at two annas in a rupee. Later, it was reduced to one-and-a-half annas and was further reduced to one anna or six paise in a rupee. During festivals and observance of handloom weeks, an additional rebate is given.

Kambli weaving

Weaving of *kamblies* or blankets is also practised in a number of villages by the members of Kurubara community. *Kamblies* are produced with black and grey-black wool available locally. Grading and spinning of wool are carried out by weavers themselves with the help of members of their family. There are 148 kambli-weaving looms in the district. Four co-operative societies have been formed by the wool weavers. They have a total membership of 429 and are located at Raichur, Gondhal, Moranhalli and Lingsugur. Assistance towards working capital and share capital has been provided in the shape of interest-free loans under the handloom development schemes. Besides, improved tools and implements have also been supplied.

The handloom industry, being the most important cottage industry of the district, is receiving considerable attention. The untiring efforts of the All India Handloom Board and the State Government to revive and develop the handloom industry, which had fallen into a state of neglect, have now begun to bear fruit. The weavers too have to adopt themselves to the changing needs of a modern and complex society. The handlom industry has a bright future, side by side with the textile mill industry.

Leather-working and tanning

A large quantity of hides and skins is available in the district. But, at present, there is no organised unit doing tanning and leather working. Attempts were made to run the tanning industry on a sound footing in the past. According to the Imperial Gazetteer of India (1909), there was a big unit at Raichur. It says: "A tannery at Raichur turns out 500 skins per day and employs 60 persons. The skins and hides are sent to Bombay, Madras and Cawnpur".

It is said that M/s. Roshan N.M.A. Kareem and Company were running a large unit of tanning industry, for about 25 years, till 1949 at Raichur. The company was producing about 2,500 skins of sheep and 2,000 skins of goat per day and the number of workers employed was about 500. The raw skins were being collected from Gulbarga, Raichur, Hyderabad, Sholapur, Gadwal and other places and the tanned skins were being sent to Madras for exporting to other countries. Unfortunately, this unit was closed. The raw skins collected from various places by merchants are now being sent to outside places.

At present, this industry has remained as an important cottage industry in the district. Though statistical data about the number of persons engaged in the industry and the exact quantity of hides and skins tanned are not available, it may be said that it is an important subsidiary occupation of Harijans in many of the villages. Raichur, Sukhalpet, Hattigudda, Lingsugur. Koppal, Deodurg and Manvi are the important centres of this industry. Mostly, chappals and country-type shoes are manufactured at these centres. Salt is used to preserve the hides and skins of dead animals. The methods adopted for flaying and tanning are very crude, resulting in inferior leather which fetches low prices. Tanning materials such as *tarwad* bark and salts are available locally in plenty.

Every effort is being made by the Government to improve the condition of this industry. A centre for retanning and re-rolling of bark-tanned leather has been started at Koppal with a capital investment of about Rs. 45,211 on machinery and equipment. There is also a provision to train artisans at this centre. A Common Facility Centre has been started at Raichur with a capital investment of about Rs. 25,308. The artisans of Raichur engaged in this industry can avail of the services of improved machinery at this centre.

Pottery

Pottery has been an ancient and important industry. The excavations at Maski have brought to light some pottery pieces with embossed or incised designs and others coated with red or black slips. The most important of these pieces are those which represent the polychrome variety. Some pieces of this have got geometric designs painted upon them and also the trident and

floral devices. Although the use of cheap metallic vessels greatly decreased the demand for earthen wares, there is still no house in the district, even of the rich, which does not use some type of earthen vessels. The potters in the district, for many centuries, have continued to make unglazed cooking pots. Among other articles produced mention may be made of earthen pitchers for drinking water, water jars, frying pans, dishes and other vessels. Special mention may be made here of the fancy earthen goblets and drinking vessels made in Raichur town.

Clays of various qualities are found widely distributed in the district. The clay, which is generally used, is a greyish loam and is mixed with horse-dung and ashes in the proportion of one basket of horse-dung and half a basket of ashes to four baskets of clay. Five to six cart-loads of clay is required for a potter family per month for this industry. The equipment of the potter consists of the traditional wheel, frames and buckets. Making of earthen products in this cottage industry depends more on the skill of hands than on equipment. The producers sell the products in the local shandies and markets and in the daily markets at Raichur. The daily average earning of a potter is estimated between Rs. 1.50 to Rs. 4 per day depending upon his capacity to produce and his skill in producing fine products.

Carpentry and Blacksmithy

As elsewhere, carpenters and blacksmiths play an important role in the rural economy of the district. They are skilled artisans. Ordinary furniture of domestic use like tables, chairs and benches are manufactured in urban areas. Besides, doors, window frames, agricultural implements, carts and several other articles are also made by them. Good quality bullock carts are made at Koppal and Raichur towns by blacksmith-cum-carpenters. There are about a dozen workshops at Koppal and Raichur where these carts are manufactured and supplied to other parts of the district. The carpenters work in groups as well as in family circles and a carpenter earns from about Rs. 2.50 to Rs. 6 per day depending upon his skill and demand in the place. In each town, there are several carpentry establishments, including those which manufacture ordinary furniture. The number of such establishments is on the increase due to increased demand for furniture in recent years. Costly wood, such as teak and rosewood, are obtained from Hubli, Sholapur and such other places which are outside the district; screws and polishes are obtained from Bombay, Sholapur and Bangalore. Many of the individual carpenters are unable to purchase the requisite quantities of wood on account of their poverty and, therefore, they are working in bigger establishments on payment of wages. As regards blacksmithy, every town or big village has at least one or two or more families engaged in this industry. They produce agriculutral implements, buckets, etc. The tools and equipment used by them are anvils, hammers, blowers, chisels and furnaces. The raw materials required are mainly iron

sheets, round bars and flats. It may be said that generally the earning of a blacksmith is a little less than that of a carpenter.

Basket and mat-making

Basket and mat-making from bamboo and date-palm leaves provides full-time as well as part-time employment for a large number of persons in the rural areas. Baskets in different sizes and shapes, *thattis,* mats and other articles are made for domestic use. Mats from wild date-palm leaves are produced in fairly large numbers and are used for packing gur, chillies and tamarind. Besides basket and mat-making, bamboo provides the raw material for a large number of articles manufactured by manual labour and by people who have little or no capital at all. Very nice articles of household use, such as house-partitions and screens, tree guards, cots, chairs, tables and trays are made from bamboo. The earning of those engaged in this industry is from Rs. 2 to Rs. 3 per day. The bamboo-workers of this district have dexterity in their work, but they should be taught to move with the times and to make fashionable articles also, just as it is done by the craftsmen in other parts of India. Articles such as carriers for tiffin boxes, attractive and handy baskets with covers and handles from the outer parts of the bamboos can well be made and these will fetch good prices.

Salt-making Industry

Salt-making is a seasonal industry in Raichur district. Manufacture of salt from salt-earth and saline water is carried on in several villages from time immemorial. The salt-makers, known as 'Uppars', are generally agricultural workers. During the off-season from January to middle of June, they collect salt-earth by scraping barren patches of fields and waste-lands and also from stream-beds. The saline water is obtained from streams and salt wells. Evaporation method is employed and both edible and tannery salts are manufactured. Edible salt is generally manufactured from salt-earth. A good deal of care and experience is necessary in the selection of salt-earth as the quality of salt manufactured depends mainly on the selection of salt-earth and water used for extraction. Saline waters of *nalas* and wells are also used for salt-making. Generally, they contain impurities such as sulphates and thus yield mostly tannery salt. The methods of manufacture differ according to the sources of salt. Where earth is the source, it is brought to the salt works known as *malis* and put into the extraction plant. The extraction plant is shaped like a funnel with a hole in the centre covered with sand. Sweet or saltish water is poured over the earth and concentrated brine called *chora* is taken through a channel to a pit made of lime concrete. The *chora* is allowed to settle here. The clear liquid is then transferred from the stock pits to salt-pans *(kattas)* which are of varying sizes from 5'×5' to 8'×8'. The depth of *chora* is kept from ½" to 1". It takes from four to five days to dry on hot days. Generally, there are four to five *kattas* in every salt *malis*. The salt is scraped with an iron scraper when it dries up completely.

The scraped salt is kept in heaps for a couple of days and then removed for consumption. This is the common process in most of the salt-earth *malis*. Bigger *kattas* are constructed in salt works where saline water is the source of salt-making. Water is poured directly into the *kattas* and allowed to concentrate. At some places, the water is transferred to another *katta* after it undergoes a certain amount of concentration. Here it is allowed to dry. The dried salt is scraped and heaped.

Both edible and tannery salts are produced at various places in Lingsugur, Sindhanur, Gangavati, Raichur, Manvi and Deodurg taluks. According to a recent estimate, the total annual production of edible salt was about 27,000 maunds and that of tannery salt 12.000 maunds. Edible salt is consumed locally in villages. Tannery salt is, however, exported outside the district. Of late, the production of both edible and tannery salts has decreased considerably. The system of annual auction of *malis*, low returns and at some places want of salt-earth and scarcity of saline water for extraction led to a fall in production. " The salt-producing industry, which was in a flourishing condition in the region in the past years, has now become extinct though attempts have been made now and then to revive it. Except for the production of salt by the local Uppars, for their domestic consumption, no large-scale extraction is being carried on at present."*

Handicrafts

Beautiful wooden idols, toys and theatrical equipments are manufactured at Kinhal, an interior village about eight miles from Koppal railway station. There are about twenty families of the 'Chitragar' community engaged in this industry. Certain varieties of soft-wood known as *Pallaki Katgi* and *Yelgatti* are used to produce these articles. The articles produced are of exquisite quality and finish. The entire work, which is done with modest tools, requires a high degree of craftsmanship. The articles produced are generally in traditional patterns and comprise the following:

(i) Idols of deities such as Lakshmi, Saraswati, Shankara, Parvati, Hanuman, Garuda, Ganapathi, Gowri and several others. The idols are beautifully painted and produced in small, medium and also in big sizes.

(ii) Animals, mostly of religious significance, such as bull, cow, monkey, elephant, deer and snake.

(iii) Models of all sorts of fruits and vegetables in natural shapes and sizes with a realistic touch.

(iv) Wooden headgears, costumes, masks and various other articles used in Indian ballet dances.

* Bulletin No. 23—Mineral Resources of Bidar, Gulbarga and Raichur districts, Department of Mines and Geology, Bangalore.

(v) Cradles, *peethas* and such other articles in fascinating colours.

The artisans needed assistance in the shape of finance, supply of raw materials, improvement in working technique and also in marketing of finished goods. The Department of Industries and Commerce has taken measures to resuscitate this industry. Required varieties of wood, which were not available to artisans, were supplied, improved tools were given through grants to artisans and marketing of finished goods was arranged through Government Emporia. A scheme sanctioned by the All-India Handicrafts Board for training of artisans was taken up during the year 1958-59 at a cost of Rs. 5,130. A co-operative society named the "Chitragar Industrial Co-operative Society" was formed at Kinhal in 1958 with 29 members on its roll. This society was given a loan of Rs. 6,800 and a grant of Rs. 7,300. It also received some amount in the form of subsidy from the Handicrafts Board.

This cottage industry, which flourished well in the past, is unfortunately losing its hold. The number of families engaged in this craft has gone down. The co-operative society, started with the object of safeguarding the interests of the Chitragars of Kinhal, does not seem to have been able to help them much either. Sustained and earnest efforts are called for if this age-old craft is to survive long. The Handicrafts Survey Monograph, prepared in connection with the Census of India, 1961, has dealt with this craft of Kinhal and has observed as follows:—

"The fact that the craftsmen are pursuing the trade in spite of all its vicissitudes and are creating conditions favourable to their progenies also taking up the same avocation is indicative of their deep and unswerving respect to their hereditary craft .... In the conditions now obtaining, there is hardly any scope for improvement in their living conditions. The competition they have been compelled to face in the market after the advent of plastic toys has no doubt hit this industry which now seems to be falling on evil days. Yet these products by virtue of their durability and natural appearance can, doubtless, hold their own in the field, if only steps are taken to organise the craft scientifically and place it on a sound footing. The handicraft experts should, therefore, bestow their serious and earnest thought to the matter and suggest ways for resuscitating the craft and make it adequately paying for those who practise it."

Apa-shahi and Salim-shahi shoes

The manufacture of leather foot-wear in traditional patterns, commonly known as Apa-shahi and Salim-shahi, is carried on from a long time in Raichur town by a section of the 'Mochis'. "Raichur town is noted for its gilt and coloured soft native slippers, which are exported far and wide, and also for its fancy earthen goblets and drinking vessels" says the Imperial Gazetteer of India

(1909). The Apa-shahi shoes are a sort of slippers made entirely by hand. A cushion, which is provided beneath the insole, makes the shoe very soft and comfortable. Salim-shahi shoes (Charawa shoes) are produced in various attractive designs and patterns. Superb craftsmanship of the worker and the use of superior raw materials make the shoe not only light and highly comfortable but also durable. They are excellent for home use. Referring to these shoes, the report on the survey of handicrafts in eight districts of the Mysore State, conducted in 1960-61 by Shri S. S. Mensinkai of the Economics Department of the Karnatak University, says :—

"The art of manufacturing these particular types of shoes seems to have been learnt from Persian workers who migrated to Hyderabad years ago. This handicraft like Bidiriware originated in Persia and migrated to Hyderabad and is now confined to Raichur in the new Mysore State". And further it observes : "The skill in manufacturing the shoes of the particular types lies in thinning the sole leather in such a way that when the shoes are ready for use, they will be so thin, light and comfortable that each one of the pair of shoes could be folded and inserted in an empty match box. This was actually observed by us."

The industry, which once used to provide employment to a number of persons had, however, fallen on bad days on account of lack of local demand, which was partly due to change in the taste of consumers and partly due to competition from cheap machine-made slippers and chappals. Efforts were made to revive this industry in recent years with the assistance of the All-India Handicrafts Board. The only surviving master-craftsman was appointd as instructor and about 25 hereditary artisans were trained during the years 1955-56 and 1956-57 at a total cost of Rs. 8,560. In addition to this, a sum of Rs. 10,000 was given as loan to a co-operative society of the workers engaged in this industry towards its working capital. An amount of Rs. 14,360 was also provided to this society as a grant. But still this industry seems to be suffering from lack of the much needed publicity and marketing facility.

Hand-embroidery Industry

Hand embroidery is practised by a section of the Khatri community of Bhagyanagar, a village near Koppal. The embroidered pieces, done in line stitch and cross stitch, depict traditional motifs of parrot, peacock, temple and temple gate, various flowers and animals. Artistic *choli-khana* fabrics, embroidered sarees and garments of established reputation are produced here. The attractive and native motifs of embroidery, tastefully arranged in gorgeous colour schemes, are evidence of a high degree of craftsmanship.

In view of the cultural and economic aspects of this ancient craft, a scheme was drawn up to develop this industry. A training

centre was started at Bhagyanagar in March 1958 under the All-India Handicrafts Board. Later, the training centre was converted into a production centre and continued during the year 1958-59. The purpose of the scheme is to provide employment for workers and to modernise their motifs without disturbing their traditional skill. The budget grant of the scheme was Rs. 18,260 for 1958-59, including a loan of Rs. 7,000 sanctioned towards the working capital of the production centre.

Khadi and Village Industries

Considerable efforts have been made to develop Khadi and Village Industries in Raichur district. The number of co-operative societies has gone up from 20 in 1961-62 to 58 during 1968-69. The total amount of financial assistance provided to these societies under different schemes, in the form of working capital, machinery loan, building loan, *kachha* structure loan, *pucca* structure loan, stocking loan, managerial grant, production subsidy, etc., stood at about Rs. 4,04,226 in 1968-69. The industries under this head include those relating to khadi, village oil, wool, pottery, leather, carpentry, lime, hand pounding of paddy, fibre, gur and khandsari. The taluk-wise particulars of co-operative societies organised under khadi and village industries are given below :—

Name of taluk	*No. of societies industry-wise*		*Financed*	*Not financed*	*Working*	*Defunct*
1	2		3	4	5	6
Raichur ..	Village Oil	3	3	..	1	2
	Wool	1	1	..	..	1
	Pottery	3	2	1	1	1
	Leather	1	..	1	..	..
	Carpentry	1	..	1	..	..
	Lime	2	2	..	..	2
	Hand Pounding of Paddy	1	1	..	1	..
Manvi	Carpentry	1	..	1	..	.
	Leather	1	..	1	..	..
Sindhanur ..	Carpentry	1	1	..	1	..
	Leather	2	2	..	..	2
	Pottery	1	..	1	..	..
	Fibre	1	1	..	..	1
Koppal ..	Wool	1	1	.	1	.
	Village Oil	3	3	..	3	..
	Pottery	1	1	1	..	1
	Leather	4	3	1	..	4
	Fibre	1	..	1	..	..
	Carpentry	1	..	1	..	1

1	2		3	4	5	6
Gangavati ..	Village Oil	1	1	..	..	1
	Pottery	1	1	..	1	..
	Leather	2	2	..	..	2
	Carpentry	1	..	1	..	..
	Hand Pounding of Paddy	2	1	1	1	1
	Gur and Khandsari	1	1	..	1	..
Deodurg ..	Village Oil	1	1	..	..	1
	Leather	4	4	..	1	3
	Pottery	1	1	..	..	1
Lingsugur ..	Wool	1	..	1	..	..
	Leather	1	..	1	..	..
Kushtagi ..	Leather	2	1	1	..	2
	Pottery	1	1	..	..	1
Yelburga ..	Village Oil	2	2	..	1	1
	Leather	5	4	1	..	4
	Fibre	1	1	..	..	1
	Carpentry	1	1	..	..	1
	Total	58	42	16	13	34

There are four wool-weavers' co-operative societies, out of which only one society has been certified by the Khadi and Village Industries Commission. There are 44 looms and the total number of spinners and weavers is about 90 in these societies. The total value of production for the last two years was about Rs. 62,406 and of sales about Rs. 58,460. Out of ten oilmen's societies, only four are working. About 45 *ghanas* have been brought into the co-operative fold. Their particulars of production, etc., for the last two years were as given below :—

Total Production		*Value in Rs.*	*Employment*		*Wages paid in Rs.*
			Full-time	*Part-time*	
Quintal	Kg.				
475	08	1,68,523—75	13	39	7,283—00

Khadi Industry

Khadi industry is one of the important village industries of the district, cotton being available in plenty. The Karnataka Grama Seva Sangha, Raichur, which has been certified by the Khadi and Village Industries Commission, Bombay, was established in the year 1946 with the object of implementing constructive programmes of Gandhiji in the rural areas. A production centre was started at Mudgal by this Sangha. Later, it took charge of the Khadi Production Centres at Tawargera and Gadwal (which was then in Raichur district) from Karnataka Charkha Sangha, Hubli, and also of the Khadi Centre of Raichur city. Particulars of production centres, khadi bhandars, etc., run by this Sangha are given below :—

Year	*Khadi Bhandars*	*Production Centres*	*Work-shops*	*Gramodyoga Units*
1950	1	2	..	..
1956	3	3	1	..
1960	5	4	2	..
1968	10	7	2	6

The Sangha distributed 775 *ambar charkhas* during the period from 1955 to 1962. It has also been running an All-Metal Ambar Charkha Unit at Raichur. From 1952 to 1968, 2,000 old-type village *charkhas* were also distributed among the people in different parts of the district. The following industries have been organised in the district under the auspices of this Sangha : (1) khadi, (2) hand-made paper, (3) soap, (4) match making, (5) hand pounding of paddy, (6) carpentry and blacksmithy, (7) dyeing and printing and (8) fibre. Particulars of production and sales pertaining to these industries are given in the sub-joined tables :—

Statement showing the production and sales of khadi (in terms of value) from 1961 to 1968.

Year		*Khadi*		*Yarn Production*	*Wages paid (in Rs.)*	
		Production Rs.	*Sales Rs.*	*Rs.*	*to Artisans*	*to Gramodyoga Artisans*
1961	..	1,76,762	1,10,147	94,935	49,159	6,161
1962	..	1,60,029	1,07,170	69,172	48,118	4,114
1963	..	1,81,067	1,22,223	61,926	58,850	4,778
1964	..	1,40,079	1,81,202	93,214	56,401	7,705
1965	..	1,50,738	1,58,617	1,50,501	1,02,052	7,511
1966	..	2,59,122	1,71,420	1,98,723	1,47,732	10,296
1967	..	2,61,071	1,67,525	1,35,676	1,02,390	10,190
1968	..	2,17,171	1,81,673	1,35,033	1,11,685	12,108

Statement showing the production, sales, etc., of various village industries (in terms of value) from 1965 to 1968.

Industry		Year			
		1965	1966	1967	1968
		Rs.	Rs.	Rs.	Rs.
Hand-pounding of Paddy	Production	16,627	65,313	1,28,995	60,650
	Sales	11,011	70,308	1,25,083	65,666
	Wages	996	3,242	5,974	2,908
Hand-made paper	Production	833	3,759	3,271	5,166
	Sales	..	915	864	5,880
	Wages	684	1,507	1,317	2,183
Soap	Production	1,380	7,756	19,189	9,911
	Sales	963	7,481	14,441	12,013
	Wages	93	384	1,017	977
Matches	Production	..	..	5,863	2,296
	Sales	..	..	5,320	2,086
	Wages	..	..	1,197	590

Industrial Training Institute

The Department of Employment and Training is running an Industrial Training Institute at Raichur. This training centre came into being in 1958 with a view to imparting training in different trades. The institution prepares welders, fitters, wiremen, machinists, electricians, carpenters, etc. About 1,175 candidates were admitted to the Institute since its inception upto 1965 and over 500 candidates were trained. (*See* also Chapter XV).

Cottage Industries Training Centres

Cottage industries training centres are of vital necessity for reviving craftsmanship, the loss of which cannot be measured in terms of money, and for developing cottage industries. The main object of such training centres is to impart training to village artisans in improved methods. Reference to two such centres, one at Kinhal and the other at Bhagyanagar, has already been made.

Rural Artisan Training Institute

The Rural Artisan Training Institute, Koppal, was started under the Tungabhadra Community Project Scheme, during October 1953, as a training-*cum*-production centre. The main object has been to impart training to village artisans and the industries selected were handloom-weaving, wool-weaving, dyeing and printing, hosiery, tanning, leather-goods making, blacksmithy and carpentry. It continued to function under the Tungabhadra Community Project Scheme till 31st March 1957 and later, consequent on the conversion of the Community Project Scheme into National Extension Service, it was transferred to the Department of Industries and Commerce with effect from 1st April 1957.

The work done by the Centre since its inception in respect of training of artisans, demonstration of improved methods, production and sales, prior to its transfer to the Department of Industries is shown below :—

Year		No. of candidates trained	Production	Raw-materials consumed	Sale of finished goods	No of demonstrations conducted
			Rs.	Rs.	Rs.	
1953—54	..	28	576	2,418	186	125
1954—55	..	73	4,525	5,665	3,069	390
1955—56	..	96	6,493	6,607	5,909	1,306
1956—57	..	113	7,798	6,971	3,323	1,945
Total	..	310	19,392	21,661	12,487	3,766

The Centre has continued to function under the Department of Industries and Commerce since 1st April 1957 and the work turned out under different heads during the last three years is as follows :—

Year		No of candidates trained	Production	Raw-materials consumed	Sale of finished goods
			Rs. P.	Rs. P.	Rs. P.
1966—67	..	53	3,277—99	3,591—20	1,385—57
1967—68	..	43	1,816—84	1,733—64	1,906—58
1968—69	..	47	3,805—29	3,697—00	4,647 23

The total number of candidates trained since 1960 is 480. During the course of training, the trainees actually work with the artisans of the Centre and get themselves acquainted with the improved tools and equipment and also with the working techniques, new designs and patterns. In addition to regular training, suitable demonstrations in improved methods are also conducted by the technical staff, both at the premises of the Centre and also in villages. The duration of training is only three months and the trainees are paid stipends at Rs. 40 per month. After the completion of the training, the workers are induced to form their own industrial co-operative societies, as the assistance from the different All-India Boards such as the Khadi and Village Industries Board, the Handloom Board and the Handicrafts Board is channelised through the industrial co-operatives.

Prior to the reorganisation of States, each of the training centres in different parts of the State had its own syllabus and method of training. With a view to effecting uniformity in the system of training and syllabus, later, the Government re-organised

the existing training institutions. The Koppal Centre has been developed as a full-fledged Rural Artisan Training Institute with a branch at Gangavati.

Embroidery Production Centre

With a view to developing the ancient craft of hand embroidery practised by a section of the Khatri silk-weavers of Katarki village, later settled at Bhagyanagar near Koppal, a centre was started with the assistance given by the All-India Handicrafts Board, during 1957-58. At first, it functioned as a training-*cum*-production centre and then, since 1st August 1958, it became a production centre. The local workers, who had almost given up this industry, again took up this industry with the encouragement given under the scheme. Thus, the local craftsmen (who are mostly ladies) found a remunerative occupation for their spare time.

Wooden Toy Industry Centre, Kinhal

With a view to reviving and developing the wooden toy industry of Kinhal village, which is an ancient handicraft, a training centre was started under a scheme sanctioned by the All-India Handicrafts Board, during 1957. A local craftsman was appointed as instructor and several artisans were trained by him. For some of the trainees, stipends at the rate of Rs. 30 per month, were paid. An industrial co-operative society of the artisans engaged in the industry was also formed and most of the trainees became its members.

Assistance to Small Industries

The State Government, through the Department of Industries and Commerce, are giving all possible encouragement to small industrialists. About Rs. 4,40,300 worth of raw-materials, including Rs. 1,05,000 worth of imported raw-materials, have so far been made available to the industries in the district. Financial assistance to the tune of Rs. 1,05,025, in the form of loans and grants, has been provided. About Rs. 22,020 worth of machineries have also been supplied to the industrialists on hire-purchase basis. That apart, the Mysore State Financial Corporation has provided loans to the tune of Rs. 40,24,500 to half-a-dozen industrial units in the district upto 1969 as follows :—

Sl.No.	Type of Industry		No. of Units	Amount sanctioned
1.	Paper and Pulp	..	1	18,25,000
2.	Sugar Industry	..	1	20,00,000
3.	Cotton Ginning, Cleaning, etc.	..	2	85,000
4.	Oil Mills	..	1	85,000
5.	Transport	..	1	29,000
	Total	..	6	40,24,500

Industrial Co-operatives

There are 96 Industrial Co-operative Societies in the district, which have been organised with the object of starting and running industries on a co-operative basis. A District Industrial Co-operative Bank came into existence in the year 1964 at Raichur. The Bank had advanced Rs. 3,51,826 to industrial co-operatives, individual industrialists, goldsmiths, etc., as loans, upto the end of June 1968. (*See* also Chapter VI).

Loans to goldsmiths

Under the Rehabilitation of Displaced Individual Goldsmiths Scheme, an amount of Rs. 50,325 has been provided hitherto in the form of loans to 104 goldsmiths to start their own industrial units.

Industrial Development Areas

It had been proposed to have two Industrial Estates in the district—one at Raichur and the other at Lingsugur. But the inadequate response received at other places led to the revision of the proposal. The Government have now decided instead to make those two places Industrial Development Areas, and an amount of Rs. 4 lakhs has been provided for this purpose.

To sum up the industrial picture of the district, it can be said that there are, in total, 346 industrial units (excluding cottage and village industries), out of which 159 are cotton ginning and pressing units. Among the nine taluks, Raichur stands first, claiming 115 units. The taluk-wise and industry-wise particulars are given in the following statement :—

Statement showing the talukwise number of industrial units in Raichur district

Name of Industry	Raichur	Manvi	Sindhanur	Gangavati	Koppal	Yelburga	Kushtagi	Lingsugur	Deodurg	Total
1. Cotton Ginning and Pressing ..	29	30	18	7	11	16	9	26	13	159
2. Oil Mills ..	18	..	..	2	18	2	..	..	..	40
3. Rice Mills	8	1	2	10	..	..	..	..	..	21
4. General Engineering	14	..	..	2	3	..	..	..	..	19
5. Saw Mills	7	1	1	3	3	1	..	1	1	18
6. Printing Presses	12	1	1	1	3	..	1	1	1	21
7. Paper Pulp and Board ..	..	..	..	..	1	..	..	..	..	1
8. Chemicals and Fertilisers ..	1	..	..	1	1	..	..	..	..	3
9. Ferrous and Non-ferrous ..	7	1	1	3	2	1	2	2	2	21
10. Plastic Wares	..	..	..	..	3	..	..	..	..	3
11. Tyre-retreading	2	..	..	1	..	..	..	..	..	3
12. Leather Works	5	2	3	2	3	1	2	2	2	22
13. Cement Products	2	..	..	1	..	..	..	..	..	3
14. Soap	4	..	..	..	..	..	..	..	..	4
15. Agarbathi	1	..	..	..	..	..	..	..	..	1
16. Bread and Biscuit	3	..	..	..	2	..	..	..	..	5
17. Bag-making	2	..	..	..	..	..	..	..	..	2
Total ..	115	36	26	33	50	21	14	32	19	346

Scope for development of industries

The Small Industries Service Institute, Bangalore, had carried out a survey of industrial development potentialities in Raichur district in 1961. After an analysis of the resources, the survey report has concluded that there is vast scope for expansion and modernisation of many existing industries and also for starting new industries.

With the rise in the numbers of cotton-ginning and pressing factories, oil, rice and flour mills, irrigation pumpsets, transport vehicles, etc., there is a large scope for development and expansion of general engineering units. The new vista of development in the agricultural field opened up by the Tungabhadra Project has created and will continue to engender a heavy demand for agricultural implements. The progress achieved in the field of communications, especially the construction of better and new roads and bridges linking the district with different parts of the State as well as neighbouring States, has created considerable pressure on existing units of tyre-retreading and automobile repair works. Likewise, there is wide scope for the expansion of industries like wood-working, oil mills, confectionery, etc.

There is already a sugar factory at Munirabad and one more is expected to be started soon. Therefore, with the bagasse released from these two factories, it is not difficult to run a paper industry. At present, a large quantity of bones of animals collected in the district is being sent outside. This can very easily be used as raw material in the production of bone-meal for which there can be a rising demand in and around the district. So also, there is scope for a new unit of mixed fertilisers. As there is plenty of cotton available in the district, there will be good prospects for surgical cotton industry. The possibility of starting a textile mill can also be explored. If the natural resources available in the district and the various facilities provided by the Government under different programmes for development are made use of properly, the Raichur district may soon find an important place on the industrial map of the Mysore State.

TABLE 1

Total annual production of gold and other metals—silver and copper—(*i.e.*, metals produced along with gold) at the Hutti Gold Mines

Particulars	1953—54	1954—55	1955—56	1956—57	1957—58	1958—59	1959—60
Tonnage treated (S. tons)—							
Ore	68,344	82,804	83,343	83,778	85,494	88,384	1,05,215
Old Tailings	..	.	.	6,274	7,085	4,969	523
Gold recovered (Mine weight)—							
Ounces	16,927.64	17,492.61	18,098.79	16,143.73	14,160.36	15,248.48	16,041.48
Grams	5,28,420	5,44,093	5,62,942	5,02,135	4,40,425	4,74,266	4,98.931
Average price realised—Rs.							
Per ounce	232	248	270	284	292	317	347
Per 10 gms.	74.58	79.73	86.80	91.30	93.88	101.91	111.56
Value of gold produced—Rs.	39,25,605	43,30,251	48,75,525	45,90,295	41,12,410	48,28,211	55,61,987
Silver recovered (Mine weight)—							
Ounces	1,035.49	1,077.04	1,122.25	1,254.10	1,183.00	1,237.55	1,365.93
Grams	32,207	33,500	34,906	39,007	36,795	38,492	42,485
Value of Silver realised Rs.	4,482	4,789	5,529	4,919	4,846	5,368	6,603
Copper recovered—							
Ounces	..	16.98	34.08	22.09	102.91	49.06	..
Grams	..	528	1,060	687	3,201	1,526	..
Value of copper recovered—Rs. ..	..	2.31	4.75	2.23	10.11	4.82	..
Total value realised—Rs. ..	39,30,087	43,35,043	48,81,059	45,95,216	41,17,240	48,33,583	55,68,590

TABLE 1 (*Contd.*)

Particulars	1960—61	1961—62	1962—63	1963—64 (1/2 year)	1964—65	1965—66	1966—67	1967—68
Tonnage treated (S. tons)—								
Ore	1,15,209	1,21,777	1,20,726	58,564	1,05,661	88,574	1,17,768	1,19,698
Old Tailings	..	..	717	..	7,952	27,352	..	..
Gold recovered (Mine weight)—								
Ounces	21,098.28	25,113.38	28,986.31	13,740.50	25,323.45	26,764.90	29,607.05	29,607.90
Grams	6,56,221	7,81,102	9,01,565	4,27.393	7,87,633	8,32,485	9,20,881	9,20,909
Average price realised—Rs.								
Per Ounce	372	380	320	350	369	384	451	527
Per 10 gms.	119.60	122.17	102.88	112.52	118.63	123.45	144.99	169.57
Value of gold produced—Rs.	78,58,440	95,38,759	92,68,654	48,12,434	93,49,561	1,02,65,909	1,33,46,253	1,56,16,148
Silver recovered (Mine weight)—								
Ounces	1,802.90	2,064.44	2,407.85	1,134.57	2,015.79	2,086.92	2,411.23	2,411.57
Grams	56,076	64,213	74,892	35,289	62,698	64,910	74,998	75,008
Value of silver realised—Rs.	9,284	11,486	14,688	6,935	15,750	16,475	20,719	30,174
Copper revcoered—								
Ounces	..	..	..	..	..	..	..	..
Grams	..	..	..	..	..	..	..	..
Value of copper recovered—Rs.	..	..	..	..	..	..	..	..
Total value realised—Rs.	78,67,724	95,50,245	92,83,342	48,19,369	93,65,311	1,02,82,384	1,33,66,972	1,56,46,322

TABLE 2

Profit and Loss Account of Hutti Gold Mines.

(Rs. in lakhs)

	1948—49	1953—54	1958—59	1964—65	1965—66	1966—67	1967—68
Revenue	7.41	39.48	48.86	95.43	109.85	142.73	162.74
Mining and Treatment ..	7.15	26.18	32.05	46.96	51.15	66.01	74.84
Other Costs	1.81	7.69	8.28	16.61	17.66	21.52	26.54
Total Working Costs	8.96	33.87	40.33	63.57	68.81	87.53	101.38
Working Profit	..	5.61	8.53	31.86	41.04	55.20	61.36
Working Loss	1.55	..	..	..	..	..	..
Provisions for —							
Interest on loans	0.40	1.29	2.20	9.12	15.65	21.61	21.32
Depreciation	3.00	7.77	7.01	11.39	9.77	9.68	10.46
Amortization	..	..	..	..	..	..	..
Wealth Tax	..	.	..	.	..	..	..
Royalty	..	..	3.02	6.24	7.42	9.08	9.94
Reserve	..	..	..	..	..	1.00	2.00
Income Tax	..	..	..	..	..	2.15	10.00
Development Rebate	..	..	..	1.26	0.83	0.51	1.87
Dividend	..	..	..	..	..	3.41	5.68
Net Profit	..	..	..	3.85	7.37	7.76	0.09
Net Loss	4.95	3.45	3.70	..	..	..	..
Progressive Profit(+) Loss(—) ..	—4.95	—17.64	—28.26	—15.09	—7.72	+0.04	+0.13

TABLE 8

Particulars of cost per ton of mine ore of production at Hutti Gold Mines

(In Rupees)

	1948—49	1953—54	1958—59	1964—65	1965—66	1966—67	1967—68
Mining and Treatment	165.7	38.3	35.7	44.4	57.8	56.0	62.53
Other Costs	49 9	11.2	9.4	15.7	19.9	18.3	22.17
Total working cost ..	215.6	49.5	45.1	60.1	77.7	74.3	84.70
Add—							
Interest on Loans	9.2	1.9	2.5	8.6	17.7	18.4	17.81
Depreciation	69.6	11.4	7.9	10 8	11.0	8.2	8.74
Royalty	..	..	3.4	5.9	8.4	7.7	8.30
Total ..	294.4	62.8	58.9	85.4	114.8	108.6	119.55
Average price realised per ounce (in rupees)	301	232	317	369	384	451	527

TABLE 4

Statement showing particulars of loans and grants disbursed for various purposes to Weavers' Co-operative Societies in Raichur district from 1954-55 to 1968-69.

Sl. No.	Weavers' Co-operative Society at	Working Capital loan	Share capital loan		Grants for dye-house	Loans for dye-house	Grants for conversion of looms	Loans under R.B.I. scheme
		Rs.	Rs.	P.	Rs.	Rs.	Rs.	Rs.
1.	Maski	19,800	..		4,560	2,000	850	30,000
2.	Deodurg	13,900	.		..	..	725	25,000
3.	Kinhal	30,600	..		4,560	2,000	1,900	..
4.	Hanamsagar	12,600	5,685	00	..	..	450	10,000
5.	Dotihal	6,600	3,712	50	..	2,000	.	7,000
6.	Tawargera	6,400	5,850	00	4,560	2,000	..	13,000
7.	Manvi	3,300	..		..	..	..	10,000
8.	Bhagyanagar	41,400	1,620	00	..	..	2,000	..
9.	Balganur	..	..		..	..	..	5,500
10.	Hoskanakapur .. .	.	..		..	..	..	6,000
11.	Gondbal . ..	3,400	340	00	..	..		..
12.	Raichur . ..	30,000	3,000	00	..	.	..	..
13.	Moornahalli	2,000	200	00	..	..	..	..
14.	Lingsugur	25,000	2,712	15	..	..	..	..
	Total ..	1,94,900	23,119	65	13,680	8,000	5,925	1,06,500

CHAPTER VI

BANKING, TRADE AND COMMERCE

A—Banking and Finance

In earlier decades

NOT much can be gathered about banking facilities in the past except that a fund called the Chavani Fakirappa Fund initiated more than half a century ago ran for some time, and played a fairly important part in the district. Though credit institutions were started in earnest by some well-meaning persons, they went into liquidation soon either for want of patronage or due to mal-administration. People in Raichur still remember the part played by the Chavani Fakirappa Fund which can be said to have laid the foundation for modern banking practices in the district. But the private money-lenders stood in the way of any systematic development of modern ideas; futrher, the rules and regulations of the Fund were so cumbersome that people preferred to go to the private money-lenders. About forty years ago, several banking institutions emerged to play a fairly positive role in creating public confidence in banking. Amongst these, the Mahalaxmi Deccan Bank, Saraswati Bank, Osmania Aziz Bank and Sharada Banking Company Limited, were the most prominent. But, these did not meet with much success and had to close down.

Though the Raichur district was rich in trade and commerce, indigenous banking business, however, did not thrive well. Even the Imperial Bank of India had to close down its branch at Raichur. The reason for this could be attributed to lack of clientele, as the banking habit had not grown. It was only later that governmental statutory powers gave a fillip and confidence to the people to deposit money or obtain credit from the banks. It is only during the last two decades and a half that big banking institutions started their branches in the district; these are now playing a useful role in providing a wider base to the economy of the district.

A large number of agriculturists, who are in need of ready money, still go to private money-lenders and get their credit at heavy rates of interest. In 1958-59, there were about 200

licensed money-lenders in Raichur district. At first, the statute governing money-lenders came into force in 1936 when the State stipulated the method of licensing and the rates of interest to be charged. Till the advent of co-operative credit institutions, the old practice of giving loans on securities prevailed to a large extent. The role of co-operative institutions in the field of credit is described later in this chapter. The money-lenders, who do money-lending as a profession, have to obtain a licence from the office of the Deputy Registrar of Co-operative Societies on payment of a required fee. The licensed money-lenders are required by law to maintain regular accounts of the loans paid, the interest charged and the like. All these records have to be kept open for inspection by the authorities concerned. The licences have to be renewed year after year. The antecedents of the person are taken into account before a licence is issued to him.

Scaling down of agricultural indebtedness by various helpful schemes has been the policy of the State Government. The Agriculturists' Debt Relief Act has been responsible for reducing rural indebtedness on an agreed basis between the creditor and debtor. The relief obtained by this measure may not be much, but the psychological feeling it creates in the minds of the rural folk is noteworthy. The rural population is easily susceptible to indebtedness because of the ever-present necessity for cash to buy agricultural implements, manures and other things for cultivation. The age-old custom of obtaining this sort of credit is still in existence in spite of the growth of co-operative societies, land development institutions and banks. This is partly due to the fact that the raiyats have a feeling that loans cannot be got easily through banks or co-operative institutions because of the complicated procedures. Till this is remedied and matters made easy, the reliance on money-lenders cannot be eliminated.

Money-lenders

In the earlier days, people depended very heavily on money-lenders for their credit requirements. These money-lenders dominated the rural sector to such an extent that an impression was created among the people that without the help of money-lenders it was not possible for the agriculturists to carry on their agricultural operations in time. Most of these money-lenders were also traders. People borrowed money from the money-lenders at a high rate of interest. The rate of interest charged often ranged from 18 to 24 per cent. As already stated, there were about 200 money-lenders in the district as at the end of last decade.

Though the Government took necessary steps, from time to time, to regulate the business of money-lending on the one hand, and to provide credit facilities to the raiyats through the co-operative societies on the other hand, money-lenders have success-

fully maintained their hold on the agriculturists, though to a lesser extent than it was a few years ago. "Investigation reveals that the cultivators still cling to the money-lenders, as they require credit every year to defray the expenses on cultivation which the local co-operative society has not been able to meet to an appreciable extent, as it has not been functioning effectively. In these circumstances, the villagers are left with no other alternative than to rely on their old patrons though they have to pay a high rate of interest. Another main difficulty is that the co-operative society does not disburse whatever it sanctions in proper time. The cultivators require money when the agricultural operations are in full swing and if there is any delay on the part of the co-operative society either in the matter of sanctioning the loan or in disbursing it, the very object of the grant of the loan gets defeated. The merchants on the other hand oblige the agriculturists by granting them loan at any time and the cultivators, therefore, do not mind paying a higher rate of interest. The old order thus continues in spite of the fact that the co-operative society is expected to play a more effective role" observes a Village Survey Monograph.* Further, the Monograph says that private agencies continue to play a dominating role in the matter of providing credit facilities. "Out of the total debt incurred by the villagers, a sum of Rs. 53,150 has been borrowed from money-lenders of Gangavati and a sum of Rs. 1,71,907 has been borrowed from other private persons. Thus the loan granted by the private agency constitutes 71.5 per cent of the total amount borrowed, whereas the sum of Rs. 77,490 granted by Government upto 1960 constitutes 24.67 per cent and that granted by co-operative society works out to Rs. 3.9 per cent of the total debt." However, it may be said that much headway has been made in the co-operative field in the district in recent years. There were only 59 registered money-lenders in the district as on 31st March 1968.

Sample Survey

The Government of the erstwhile Hyderabad State decided to have a thorough enquiry regarding the extent of indebtedness in the State in the year 1937. Mr. S. M. Bharucha, an officer of the Hyderabad Government, who conducted the enquiry, selected some sample villages in every district. The result of the survey disclosed that, on an average, the debt was Rs. 187.50 per *pattedar*, when all the *pattedars* (including those who were not in debt) in the selected villages were taken into account. But, when only those *pattedars* who were in debt were considered, the average debt per *pattedar* stood at about Rs. 391. The burden of debt per acre was about rupees ten whereas the average revenue assessment was less than rupees two (Rs. 1-13-0) per

*Census of India, 1961, Vol. XI, Mysore, Part VI, Village Survey Monographs, No. 10 Yerdona Village, Gangavati taluk, Raichur district, 1966.

acre. The actual incidence of debt worked out to be almost double this amount, as about half the number of *pattedars* included in the survey were non-agriculturists and were free from debt. The burden of interest was very acutely felt. Rates of interest varied according to the status and standing of the borrower and in proportion to the fertility and value of the land owned by the borrower.

Recent developments in the district have added a new dimension to this problem of indebtedness in the rural areas. With the extension of irrigation and other facilities, the need for credit for conversion of dry lands into wet lands and for the purpose of purchasing improved implements and fertilisers, has considerably increased. Consequently, the indebtedness has increased. According to the Yerdona Village Survey Monograph, "231 households or 76.2 per cent of the total number of households have borrowed an amount of Rs. 3,11,777 which on an average worked to Rs. 1,350 per household. The per capita debt comes to Rs. 192."

Regarding the causes of indebtedness, the Survey reveals that about 75 per cent of the total debt incurred was for productive purposes and the rest for unproductive purposes. Among the productive purposes, land development claims the highest share with 56.25 per cent. The particulars are as given below :—

Purpose of debt	*Percentage to total debt*
Purchase of land	5.20
Housing	2.57
Purchase of livestock or bullock carts ..	2.20
Purchase of seeds and fertilisers ..	3.88
Land development	56.25
Industry run by the house-hold ..	3.54
Business	1.54

Referring to the debt incurred for unproducitve purposes the Survey disclosed that a sum of Rs. 31,560 (10.13 per cent) was borrowed for the purpose of marriage by 26 households and a sum of Rs. 46,427 (14.89 per cent) was borrowed by 101 households for 'ordinary wants'. According to the Monograph, "Custom and tradition as well as a sense of prestige are the main factors which drive the people to contract debts for purposes like marriage. With the increase in the educational standard among boys and a rise in the income earned by the households, there is a greater urge for spending larger amount on marriages . . . . The fact that 101 households have been

driven to the necessity of borrowing for 'ordinary wants' clearly indicates that their resources are insufficient even to carry on their livelihood. In other words, 1/3 of the total number of households are not able to carry on their livelihood." The Survey has also revealed that the number of households indebted, as well as the average indebtedness in each income group, increases with the rise in income.

Relief measures

The Government of the erstwhile Hyderabad State, realising the seriousness of the problem of rural indebtedness, had taken some remedial measures to alleviate the distress of the agriculturists. It had provided *taccavi* loans for agricultural operations, at a very low rate of interest, about six or six-and-a-half per cent, sometimes even less than that. Loans were provided also for the purchase of seeds and agricultural implements. When the Government realised that the lands of the agriculturists were passing into the hands of the money-lenders, reducing them into agricultural labourers, it adopted a Land Alienation Regulation in 1936. This was first introduced in the two Marathwada districts of Aurangabad and Osmanabad, as an experimental measure, and later it was extended to all the other districts. Further, with a view to relieving the cultivator of the burden of his old debts, a Debt Conciliation Act was passed in 1938. The Act helped the agriculturists in effecting a reduction in their debt, a large part of which, generally, consisted of accumulated interest, through conciliation. Further, the Government promulgated a Money-Lenders Act in 1938, which aimed at checking the various malpractices of the money-lenders. It had fixed the rates of interest for future dealings and enforced compulsory registration and licensing of money-lenders. It had fixed the maximum permissible rate of interest at nine per cent for secured debt and twelve per cent for unsecured debt. According to the Act, every money-lender had to submit a statement, at the end of every year, to each of his debtors showing the amount payable to him, and they were required to issue receipts for the amounts paid by the debtors.

In response to the public demand for a comprehensive and uniform measure applicable to all the districts of the new Mysore State, the Mysore Money-Lenders Act, 1961 (Mysore Act 12 of 1962) and the Mysore Pawn-Brokers Act, 1961 (Mysore Act 13 of 1962), were enacted which came into force in 1965 throughout the State. According to the provisions of this Act, money-lenders and pawn-brokers can run their business only after obtaining the required licences from the authorities concerned. They are required to maintain all the accounts relating to their business and submit returns as prescribed. The Government have fixed the maximum rate of interest permissible at 15 per cent on secured loans and 18 per cent on unsecured loans. The Registrar of Co-operative Societies has been made the *ex-officio* Registrar-

General of Money-Lending, having jurisdiction over the entire State.

Along with these legal measures, a number of positive steps to provide the farmers with various types of easy credit facilities have also been taken. Financial assistance of various types for agricultural purposes has been provided by the Government. Agricultural Credit Societies in the district advanced a sum of Rs. 1,48,50,000 as loans to the farmers in the year 1967-68 (as on June 30, 1968). The Primary Land Development Banks, under various schemes, had advanced a sum of Rs. 2,94,85,666 till the end of June 1969. The State Government distributed a sum of Rs. 41,52,938 in the form of *taccavi* loans during 1966-67, in addition to the loans advanced by the co-operatives and other agencies. Now, the commercial banks are also coming forward with an offer of assistance to agriculturists in a big way. "It is a very encouraging development that the Scheduled Banks in Raichur district have taken, during the last one year, a very active part in providing agricultural finance to cultivators for long-term credit for tractors and agricultural machinery and short-term credit for crop finance. A sum of Rs. 15 lakhs has been advanced to cultivators by the Scheduled Banks in Raichur district and it is expected that the advances till the end of March 1969 will reach 30 lakh rupees. The Banks which have taken the lead in this behalf are the State Bank of Hyderabad, the Syndicate Bank and the Canara Bank" says a note prepared in 1969 by the Deputy Commissioner of Raichur district.

Commercial Banks

The pace of development in the field of commercial banking in the district has been rather slow. The district had only eleven branches of commercial banks in the year 1966 against the State total of 581. As regards the deposits, the commercial banks could mobilise only Rs. 3.48 crores in the district against the total deposits of Rs. 181.74 crores in the State in that year. The share of the district both in respect of branches and in regard to deposits was only 1.9 per cent of the State during that year. The deposits had actually shown a downward trend in 1967. The total in the district stood at only Rs. 3.07 crores with 15 branches whereas the total for the State was Rs. 192.48 crores. However, it had improved its position in regard to the advances. The total amount advanced in the year 1966 was Rs. 0.89 crore whereas it went up to Rs. 1.03 crores in 1967. As at the end of March 1969, there were 18 branches in the district. The total went up to 21 with the opening of three more branches, one each by the Syndicate Bank, Central Bank of India and Canara Bank, at Sindhanur on 11th April 1969, at Sirvar on 31st July 1969 and at Gangavati on 7th August 1969 respectively. The State Bank of Hyderabad, which has nine branches, has the maximum number of branches compared with other banks having branches in the district. Next comes the Syndicate Bank with six bran-

ches. The Canara Bank and the Central Bank of India have two branches each. The banks with one branch each are the Canara Banking Corporation and Vysya Bank. The particulars of the branches and the dates of their opening are as given below :—

1. State Bank of Hyderabad—

(i) Raichur	..	4-12—1944
(ii) Koppal	..	15—1—1945
(iii) Gangavati	..	30—5—1960
(iv) Sindhanur	..	22—7—1963
(v) Lingsugur	..	28—3—1966
(vi) Kushtagi	..	16—5—1966
(vii) Manvi	..	11-12—1967
(viii) Yelburga	..	11-12—1967
(ix) Karatgi	..	28-12—1967

2. Syndicate Bank—

(i) Raichur	..	29—7—1955
(ii) Koppal	..	16-12—1957
(iii) Gangavati	..	2—1—1959
(iv) Jawalgera	..	27—2—1968
(v) Mudgal	..	12—4—1968
(vi) Sindhanur	..	26—4—1969

3. Canara Bank—

(i) Raichur	..	27-10—1958
(ii) Gangavati	..	7—8—1969

4. The Central Bank of India—

(i) Raichur	..	December 1933
(ii) Sirvar	..	31—7—1969

5. The Canara Banking Corporation—

Raichur	..	N.A.

6. The Vysya Bank—

Raichur	..	1—8—1968

There is no registered office of any bank in the district. All are branch offices.

State Bank of Hyderabad

The State Bank of Hyderabad was formerly known as the Hyderabad State Bank which was registered in August 1941. It was established to regulate and stabilise the currency of the State, manage the public debt, undertake Government (treasury) transactions, provide facilities for remittances and collections and to encourage agriculture, industry and trade. The bank was renamed as the State Bank of Hyderabad in the year 1956.

The first branch of the bank in the district was opened, in December 1944, at Raichur. The second branch was opened within one and a half months at Koppal in January 1945. The third branch was opened at Munirabad in March 1950, but it was closed in April 1956 after the completion of the dam work there. The next branch was opened after a gap of about 15 years at Gangavati in May 1960. In 1967, three new branches were opened.

The State Bank of Hyderabad has its registered office at Hyderabad. It is a subsidiary bank of the State Bank of India. It has a share capital of Rs. 50 lakhs. Its total number of branches stood at 156 as at the end of 1968. The bank is rendering a great service to the Raichur district by providing all types of banking facilities through its branches in the district. It has been rendering timely assistance to trade and commerce of the region. It has also entered the new field of agriculture and is also helping the small-scale industries units. Its particulars of deposits and advances in the district for three years from 1966 to 1968 are as given below:—

Year		*Deposits*	*Advances*
		(Rupees in lakhs)	
1966	..	230.52	13.40
1967	..	179.93	21.45
1968	..	125.15	52.76

Out of the advance of Rs. 52.76 lakhs in the year 1968, a sum of Rs. 11.36 lakhs was for agriculture and an amount of Rs. 38.19 lakhs for trade and business.

Syndicate Bank

The Canara Industrial and Banking Syndicate, now called the Syndicate Bank, was registered in October 1925. The objects of the bank, as stated in the Memorandum of Association of the bank, are " to carry on the business of bankers, commission agents and of merchants and to help cottage industries such as weaving and spinning by supplying yard and cotton at moderate price and keeping for sale commodities which will have a ready sale at any time". To-day, this is considered to be one of the biggest banks in the country with 231 branches as on 10th May 1968. The Pigmy Deposit Scheme introduced with a view to inculcating a habit of thrift and for popularising banking habits among all sections of the society, is a special feature of the bank. This nationalised bank, with its registered office at Manipal in South Kanara district, has six branches in Raichur district, the first branch to be opened being at Raichur on 29th July 1955. The other branches in the district are at Koppal, Gangavati, Jawalgera, Mudgal and Sindhanur. These branches have been

providing all the banking facilities to the people of these important towns and the neighbouring areas. The Syndicate Bank is one of the three banks which have taken the lead in providing finance to agriculture in the district.

Canara Bank

The Canara Bank, which is today one of the premier banking institutions in India, was founded in 1906 at Mangalore in South Kanara district, under the name 'The Canara Hindu Permanent Fund Ltd.' "The fund aimed at improving the economic conditions of the people by instilling in them the habit of thrift and saving. Credit was made available to businessmen, while safety was always the paramount consideration.*" There were 343 branches of this bank as on 21st August 1969, and its share capital was Rs. 1.50 crores as on 31st December 1968.

There are two branches of this nationalised bank in Raichur district, one at Raichur and the other at Gangavati. The first branch was opened in October 1958 at Raichur and the second was started at Gangavati in August 1969. The deposits and advances of the bank in the district were Rs. 18 lakhs and Rs. 27 lakhs as on 31st December 1967. The respective figures for 1969 were Rs. 18 lakhs and Rs. 19 lakhs. This bank also has taken a leading part in providing finance for agriculture and small-scale industries in the district. An amount of Rs. 55,000 was provided for agriculture and an amount of Rs. 45,000 was given to small-scale industries as loans as in June 1968. The respective figures for 1969 were Rs. 99,000 and Rs. 11.12 lakhs.

Central Bank of India

The Central Bank of India is one of the biggest of the nationalised banks in the country. There were in all 503 branches of the bank in the country and its total deposits exceeded Rs. 430 crores as at the end of 1968. The bank was established in the year 1911 with its registered office at Bombay. Among the six banks which have branches in the Raichur district, the Central Bank was the first bank to start its office at Raichur in the year 1933. Its second office in the district was opened at Sirvar on 31st July 1969. These branches are mobilising deposits under different schemes of the bank. Main advances of the bank in the district cover commodities like groundnuts, cotton and oilseeds. Recently, the bank has started providing the agriculturists with credit facilities for agricultural requirements. It is also rendering assistance to small-scale industries.

Canara Banking Corporation

The Canara Banking Corporation, which was established in the year 1906 as a *Nidhi* with a capital of Rs. 5,000 has grown into one of the leading commercial banks in the private sector with a paid-up share capital of Rs. 37,50,000. There are in all 77

* Diamond Jubilee Souvenir, Canara Bank Ltd.

branches of this with its registered office at Udipi in South Kanara district. The total deposit of the bank stood at Rs. 20.30 crores as at the end of June 1969. The bank accepts deposits under various schemes and provides loans for trade and commerce, agriculture and industry.

This bank has a branch office at Raichur. The main object of this branch is to mobilise public savings and render assistance to trade and commerce. The financial assistance rendered by this bank exceeded Rs. 12 lakhs in the district in the year 1968, while the total deposits stood at Rs. 13.79 lakhs at the end of the year 1968. The advances are mostly against cotton, groundnuts and foodgrains. All normal banking services are rendered by this branch at Raichur. Particulars of deposits mobilised and advances made by the branch in the district for the five years from 1964 to 1968 are as given below:—

Position as on		*Deposits*	*Advances*
		(Rupees in lakhs)	
31—12—1964	..	9.89	12.70
31—12—1965	..	10.05	6.30
31—12—1966	..	10.19	7.04
31—12—1967	..	15.01	10.89
31—12—1968	..	13.79	13.41

Vysya Bank

The Vysya Bank was established in the year 1930 with a view to providing credit to trade and commerce, particularly to the small traders, and to promoting the habit of thrift among the people by providing them with facilities to keep their savings under various types of deposits offered by the bank. Under its 'Pragathi Deposit Scheme' deposits are collected at the doors of the depositors by the staff of the bank. The bank is also rendering assistance to the agricultural sector. The share capital of the bank is Rs. 20 lakhs while its paid-up capital is Rs. 12 lakhs. The bank has in all 35 branches with its registered office at Bangalore. Its branch at Raichur was opened on 1st August 1968. All types of banking services are rendered at this branch.

Co-operative movement

The beginning of the co-operative movement in the district may be traced back to the early decades of the present century, but it was not until the birth of the Co-operative Bank at Raichur in 1919 that the movement really gained some importance. In 1921, the activities of the Co-operative Department were started in the district of Raichur. The hopes and aspirations of the co-operative movement received a set-back during the world wars, but the movement gained momentum during the successive Five-Year Plans. All the villages of the district have been now

brought under the co-operative fold, covering about 60 per cent of the agricultural families. The movement has helped the farmers to produce more and earn more by providing credit and other requisites, and in securing better prices for their produce by providing marketing facilities. It has helped the consumers in obtaining several of their requirements at fair prices. There are in all 1,338 co-operative institutions of various types in the district. They are :—

1.	District Central Co-operative Bank	.. 1
2.	District Industrial Bank	.. 1
3.	Primary Land Development Banks	.. 9
4.	Primary Agricultural Credit Societies	.. 634
5.	Taluk Marketing Societies	.. 9
6.	Joint and Collective Farming Societies	.. 41
7.	Grain Banks	.. 383
8.	Central Co-operative Wholesale Stores	.. 1
9.	Consumers Co-operative Societies	.. 44
10.	Industrial and Handloom Weavers' Societies	.. 99
11.	District Co-operative Union	.. 1
12.	Co-operative Spinning Mill	.. 1
13.	Others	.. 114
	Total	.. 1,338

Raichur District Co-operative Central Bank

The Raichur District Co-operative Central Bank Limited is playing a vital role in supplying credit to agriculturists through the Primary Agricultural Credit Societies in the district. With the rise in the acreage of localised area under different crops and also with the introduction of different programmes like I.A.D.P., I.A.A.P. and H.Y.P. in different taluks of the district, the responsibility of the bank in meeting the credit requirements of the farmers has tremendously increased. The paid-up capital of the bank was of the order of Rs. 5,26,354, the authorised capital being Rs. 15,00,000 during the year 1957-58. An amount of Rs. 32,08,688 was advanced as loans for agricultural purposes through the primary societies during the same year, and it was Rs. 56,68,320 in 1958-59. The paid-up capital went up to Rs. 42,10,000 in 1969 and the authorised capital to Rs. 50,00,000. The working capital of the bank was about Rs. 3,70,22,000 as on 30th June 1969 and the amount of loans advanced as on that date was Rs. 3,48,20,000. The particulars of deposits, advances, borrowings, recoveries, etc., for the years 1968 and 1969 are as follows :—

Particulars		As on 30—6—1968	Total	As on 30—6—1969	Total
		(Rupees in thousands)			
1. Paid-up Share Capital:					
Societies	..	2,294		2,752	
Government		1,042		1,442	
Individuals		16		16	
			3,352		4,210
2. Reserve Fund:					
Statutory	..	328		358	
Others	..	298		319	
3. Total own funds (1+2)		..	3,978		4,887
4. Deposits:					
Societies	..	6,286		7,758	
Individuals	..	844		1,633	
Institutions	..	514		585	
			7,644		9,976
5. Borrowings:					
Short-term loans		8,233		10,223	
Medium-term loans	..	725		1,080	
Cash credit	..	3,004		6,337	
Others	..	240		200	
			12,202		17,840
6. Working Capital			23,780		37,022
7. Loans advanced:					
Short-term		13,158		18,304	
Medium-term		47		1,247	
Cash credit	..	12,418		15,092	
Others	..	96		177	
			25,719		34,820
8. Loans recovered:					
Short-term	..	9,137		13,891	
Medium-term		253		217	
Cash credit	..	10,814		11,765	
Others	..	66		128	

Particulars	As on 30—6—1968	As on 30—6—1969
	(Rupees in thousands)	
9. Loans outstanding :		
Short-term ..	13,173	17,546
Medium-term	1,477	2,506
Cash credit ..	5,697	9,028
Others ..	160	112
10. Total demands :		
Short-term ..	14,586	20,977
Medium-term	715	1,477
Collection :		
Short-term ..	9,137	13,891
Medium-term	253	208
Balance : (Overdue)		
Short-term ..	5,683	7,086
Medium-term	462	1,269
11. Percentage of recovery :		
Short-term ..	63.5 per cent	66.4 per cent
Medium-term	36 per cent	14 per cent
12. Percentage of over-due to demand.	36.5 per cent	33.6 per cent
13. Percentage of over-due to outstanding.	43 per cent	40.5 per cent

Primary Land Development Banks

The Primary Land Development Banks provide long-term loans to the agriculturists. They advance loans for sinking irrigation wells, for improving and levelling of lands, for purchasing irrigation pumpsets, tractors and agricultural implements and for the redemption of old debts. There are nine Primary Land Development Banks functioning in the district. Some of these banks have purchased even tractors. Agriculturists can avail of the services of these tractors paying them the charges. The following statement gives an idea of the progress made in this respect during the period of 11 years from 1957 to 1968 in the district :—

21*

Particulars	1957	1961	1968
Number of Primary Land Development Banks.	1	9	9
Number of members .. .	347	7,575	18,624
	(*Rupees in thousands*)		
Paid-up share capital	11	109	1,285
Reserve Fund	1	1	33
Deposits	..	..	252
Loans (borrowings) . ..	109	326	16,314
Loans issued during the year .	37	125	9,111
Loans recovered during the year ..	5	5	323
Loans outstanding at the close of the year	107	327	16,028
Overdues	1	9	187
Working capital	121	436	17,884

The particulars of advances made under different schemes by these banks were, as on 30th June 1969, as given below :—

No. of Banks	*Total advances made under*			
	General Scheme	*Well Scheme*	*I.P. Set Scheme*	*A.R.C. Scheme*
	Rs.	Rs.	Rs.	Rs.
9 ..	74,42,164	72,80,000	3,45,842	1,44,17,660

The particulars of rates of interest charged and the periods of repayment of loans under different schemes are as given below :—

Schemes	*Rate of interest charged*	*Period of repayment*
General Scheme	9 per cent	15 years
Well Scheme	6 to 8 per cent	10 years
I.P. Set Scheme	9 per cent	8 years
A.R.C. Scheme	8½ per cent	10 years

Reclamation

A special scheme of the Agricultural Refinance Corporation for the reclamation of lands under the Left Bank Canal of the Tungabhadra Project has been sponsored by the State Government through the Primary Land Development Banks of Raichur, Manvi, Sindhanur and Deodurg taluks. The scheme started functioning from the year 1966 and it has been proposed to relcaim 2,00,000 acres at a cost of about Rs. 5,59,00,000 in a period of seven years. The original scale of finance was Rs. 150 per acre if the slope was at 1 per cent and Rs. 250 if the slope was at 2 per cent and Rs. 32 per acre for the removal of *haryali*. The progress of the scheme was slow in the beginning, but it gained momentum in 1967-68. Lack of bullock-power, machine-power, knowledge of scientific methods of land-levelling and low scales of finance were said to be mainly responsible for the slow progress. Later, the scales of finance were revised to Rs. 210 from Rs. 150 and to Rs. 310 from Rs. 250 per acre, depending upon the percentage of slopes.

District Industrial Co-operative Bank

The Raichur District Industrial Co-operative Bank Ltd., was registered in June 1964. The main objects of the bank are to promote small-scale and cottage industries by providing financial facilities to small industrialists and artisans, to finance industrial co-operatives and to promote thrift, self-help and co-operation, mainly among the artisans and people engaged in cottage and small-scale industries.

The total membership of the bank was 381, including 60 societies, during the year 1964-65 and it went up to 694 during 1967-68. The share capital of the bank, which was only about Rs. 25,910, went up to Rs. 1,09,706 during the same period. While the total amount advanced by the bank during 1964-65 was only Rs. 25,365, it was Rs. 2,24,700 during 1966-67, out of which the co-operative societies received Rs. 34,500. It seems the bank could not function effectively as far as advancing of loans was concerned during 1967-68, because of large overdues. It could advance only about Rs. 6,000 during that year. According to the Fourth Annual Report of the bank (1967-68), an amount of Rs. 3,46,079 was outstanding from the members and co-operative societies, out of which an amount of Rs. 49,075 was due from goldsmiths. The total of overdues was about Rs. 2,25,209. It is learnt that every effort is being made to collect the overdues and to make the bank function more effectively. The total deposits of the bank stood at about Rs. 69,000 during the year 1967-68.

Agricultural Credit Societies

The Primary Agricultural Credit Societies are playing a very important role in spreading the message of the co-operative movement in the rural areas, conferring several benefits on the members of these societies. They constitute the bulk of the co-operative credit institutions in the district with 634 societies.

Short-term and medium-term loans are advanced to the members of these societies for agricultural purposes. Credit facilities are provided to the farmer both in cash and kind. They also supply improved seeds, fertilisers, etc. The progress in this field has been encouraging. There were about 500 societies in 1957 and the number went up to 634 by the year 1968. There has been about a four-fold rise in the membership of these institutions during the same period, with 85,805 members as at the end of June 1968. The working capital of the societies had gone up from Rs. 28,01,000 in 1957 to Rs. 2,24,68,000 in 1968 and the amount of loans advanced had risen to the level of Rs. 1,48,50,000 from Rs. 15,76,000. The following particulars relating to these societies for the years 1957 and 1968 will reveal the progress achieved in this respect in the district :—

Particulars	*As on*	
	30-6-1968	30-6-1969
No. of societies ..	501	634
No. of members ..	23,091	85,805
	(Rs. in	thousands)
Paid-up share capital ..	444	4,557
Reserve and other funds ..	353	1,888
Working capital ..	2,801	22,468
Deposits ..	505	370
Borrowings ..	1,499	15,653
Loans advanced during the year.	1,576	14,850
Loans recovered ..	634	9,666
Loans outstanding at the end of the year.	1,613	15,935
Sales ..	..	13,600
Total profit earned ..	47	357

A programme has been chalked out with a view to making all the societies viable by a process of amalgamation and by liquidating such of the societies as are in a very bad shape.

Farming Societies

There were, in all, 41 Farming Societies in the district with a total membership of 929 as on 30th June 1968. The working capital of these societies was Rs. 12,47,000 with a share capital of Rs. 1,29,000. They borrowed loans to the tune of Rs. 11,01,000 and had cultivated about 345 acres of land.

Land Development Societies

To hasten the land development work in the ayacut area of the Tungabhadra Project, the Government has been encouraging the farmers to use agricultural machineries on a large scale, especially the tractors. Two Co-operative Land Development

Societies have come into existence in the district—one at Manvi and the other at Sindhanur. The Sindhanur Land Development Co-operative Society owns 22 tractors and the Manvi Society owns 19 tractors. Apart from these tractors, other agricultural implements are also being made available to the farmers on hire (*See* Chapter IV).

Marketing Societies

There are nine Taluk Agricultural Produce Co-operative Marketing Societies in the district. Suitable marketing and storage facilities are provided to the producers by these societies. They also supply fertilisers, improved seeds, insecticides and controlled goods and consumer articles. Besides, they are also functioning as agents of Government for purchasing agricultural produce.

The business of the Marketing Societies has increased considerably during the last decade. While the total purchases by these societies were to the tune of Rs. 10,91,000 in 1957, the corresponding figure for 1967-68 was Rs. 1,75,98,000. The sales went up from Rs. 7,82,000 to Rs. 1,60,97,000, during the same period. The following comparative figures for 1957 and 1968 indicate the progress achieved by the marketing societies in the district :—

Particulars		1957	1968
		(Rupees in	*thousands)*
Paid-up share capital	..	267	2,851
Working capital	..	924	8,639
Borrowings	..	208	4,629
Loans advanced	..	89	638
Goods purchased	..	1,091	17,598
Goods sold	..	782	16,097
Profit earned	..	16	602

There are in all 242 retail sales points in the district. Ten to fifteen retail sales points have been selected in every taluk, depending upon the area under demand for fertilisers, for intensive distribution work. The District Co-operative Central Bank provides cash credit loans to the primary societies so as to enable them to store enough fertilisers.

The quantity of fertilisers distributed and their value are shown below :—

Year		*Quantity distributed (in tons)*	*Value (in lakhs of rupees)*
1966-67	..	17,087	90.5
1967-68	..	19,951	145.07
1968-69	..	16,082	97.77

The Marketing Societies and the Primary Societies are also helping the cultivators to increase their agricultural production by supplying improved seeds and insecticides to them. During the year 1967-68, 2,127 quintals of improved seeds of the value of Rs. 3.34 lakhs were distributed. The Marketing Societies came forward to provide incentives to the farmers by offering prices higher than the prevailing market price. They have purchased *Chote Lerma* and *Safed Lerma* Mexican wheat seeds to the extent of 1,100 quintals and Hampi cotton seeds to the tune of 2,000 quintals for distribution among the farmers for sowing purposes during the Rabi season of 1969-70.

Construction of godowns

The Marketing Societies and the Primary Societies require a large number of godowns to store agricultural produce and agricultural inputs like fertilisers, seeds, insecticides, etc ; 86 godowns were sanctioned involving an amount of Rs. 10.76 lakhs. Out of these 86 godowns, 60 have already been completed and 18 are under construction. In addition to these 86 godowns, 15 more have been sanctioned recently. In view of the inadequate storage accommodation in the district, a special scheme for the construction of godowns is being prepared by the Marketing Societies at an estimated cost of Rs. 75 lakhs. It is proposed to secure assistance from the Agricultural Refinance Corporation for this purpose.

Five rice mills have been sanctioned to the district, out of which three have already been completed and commissioned. The work in respect of the rice mills of the Taluk Agricultural Produce Co-operative Marketing Societies of Manvi and Sindhanur is fast progressing. An amount of Rs. 2.50 lakhs has been sanctioned for modernisation of rice mills in the district The Raichur Taluk Agricultural Produce Co-operative Marketing Society has installed 20 gins with the financial assistance of Rs. 1.50 lakhs sanctioned by the Government. It is proposed to set up a cotton pressing unit at Raichur at an estimated cost of Rs. 4 lakhs. A unit for the manufacture of agricultural

implements is also to be set up at Raichur by the society, for which Government has already sanctioned Rs. 29,770.

In view of the great increase in area under irrigation in the district, there is a considerable need for a granular plant. Necessary steps have already been taken to establish a plant in the co-operative sector at an estimated cost of Rs. 21 lakhs. The first instalment of Rs. 8.25 lakhs has already been released. The mixture of fertilisers in the form of granules, which are easily absorbed by the soil, would help in obtaining better yields. The other processing units proposed to be established in the co-operative sector are :

(1) A Vanaspati Plant at Raichur
(2) Wheat Roller Floor Mill at Raichur
(3) A Solvent Extraction Plant
(4) A Cotton-Ginning Unit at Sindhanur
(5) A Cattle Feed Manufacturing Unit at Raichur.

A Co-operative Spinning Mill is being set up at Raichur with a licensed capacity of 12,000 spindles (*See* Chapter V).

Non-Agricultural Credit Societies

There are in all about 30 Non-Agricultural Credit Societies, including 11 Urban Co-operative Banks, in the district. The following figures reveal the comparative position of these institutions as on 30th June 1957 and 30th June 1968 :—

Particulars	*As on 30th June* 1957	*As on 30th June* 1968
	(Rupees in thousands)	
No. of societies including Urban Banks.	25	31
No. of members ..	2,868	3,433
Paid-up share capital ..	74	111
Reserves ..	138	147
Working capital ..	301	388
Deposits ..	85	103
Borrowings ..	4	27
Loans issued ..	30	103
Profit ..	9	21

The Urban Co-operative Banks accept all kinds of deposits; they advance loans on personal and mortgage securities, cash credit loans, loans on goods and ornaments, etc.

Consumers' Co-operative Societies

There are, in all, 44 Primary Consumers' Co-operative Societies in the district and also a Wholesale Stores at Raichur. These societies have helped to check the rise in prices of consumer articles. Out of the 44 societies, 21 have been assisted with share capital contributions and managerial subsidies. The particulars of these 44 societies and the Central Co-operative Wholesale Stores, Raichur, relating to the years 1957 and 1968, are as given below :—

Particulars		1957	1968
No. of societies	..	2	45
No. of members	..	392	11,110
		(Rupees in thousands)	
Paid-up share capital	..	24	589
Reserves	..	15	80
Working capital	..	55	2,032
Purchases	..	126	9,437
Sales	..	146	8,681
Profit earned	..	5	92

Housing Societies

There are 27 Housing Co-operative Societies in the district (including nine Co-operative Housing Societies for the Scheduled Castes and Scheduled Tribes). A picture of the progress achieved in this field can be had from the following comparative figures for 1957 and 1968 :—

Particulars		1957	1968
No. of societies	..	4	27
No. of members	..	354	6,851
		(Rupees in thousands)	
Paid-up share capital	..	8	335
Reserves	..	1	21
Working capital	..	12	1,698
Loans advanced	..	3	640

Life Insurance

Before the Life Insurance Corporation of India came into being under a Central statute, the business of insurance was being conducted in the district by agents of private insurance companies with their head offices at Hyderabad and Bombay. After the nationalisation of the Insurance Companies, a sub-office of the Insurance Corporation was established in Raichur and started functioning from September 1956. The sub-office is under an Assistant Branch Manager. There were then two field officers who were assisted by fifty active agents. Since the establishment of the sub-office, a considerable headway has been made. The sub-office started with 77 policies with an assured sum of Rs. 20,050. In 1958, there were 444 policies with an assured sum of Rs. 18,24,500.

It is the policy of the Life Insurance Corporation to pay more attention to the rural areas where the idea of insurance has yet to take root firmly. The field officers have been asked to persuade the villagers to set apart a portion of their income to get a policy as a protection for future contingencies. There are 10 Development Officers and a complement of 215 active agents representing the field force in the district and the progress in the field has been considerable. The assured amount, which was Rs. 68.83 lakhs during 1963-64, went up to Rs. 100.74 lakhs during 1967-68. The year-wise particulars are as given below :—

Year	*Sum assured*
	(Rupees in lakhs)
1963–64	68.83
1964–65	72.19
1965–66	101.83
1966–67	102.39
1967–68	100.74

The Life Insurance Corporation entered also the field of general insurance business in the year 1964. Mainly, it covers insurance on motor vehicles in the district. It also covers fire, accident, etc.

Small Savings Scheme

The Small Savings Scheme has made considerable progress in the district. The importance of this scheme as a means of capital formation and as an anti-inflationary measure is being realised more and more. The district exceeded the targets, both in respect of gross and net collections, under this scheme during the year 1964-65, and during 1968-69, the targets were exceeded in respect of Cumulative Time Deposit and Post Office Savings

Bank Accounts. The gross collection was Rs. 24,57,100 against the target of Rs. 22 lakhs and the net collection was Rs. 11,21,700 against the target of Rs. 10 lakhs in 1964-65. The number of accounts opened under the Cumulative Time Deposit Scheme in 1968-69 was 1,077, which was in far excess of the target of 500. The gross collection went up to Rs. 41,70,553 and the net collection to Rs. 15,19,973 in the year 1968-69. In all 1,189 Cumulative Time Deposit Accounts, 2,262 Post Office Savings Bank Accounts and 1,133 Five-Year Fixed Deposit Accounts were opened during 1968-69. The year-wise particulars for the last five years are as given below:—

Year		*Target*	*Achievement*
1964-65—			
Gross	..	22,00,000	24,57,100
Net	..	10,00,000	11,21,700
No. of C.T.D. Accounts	..	500	1,077
1965-66—			
Gross	..	28,00,000	29,13,647
Net	..	14,00,000	11,62,670
No. of C.T.D. Accounts	..	3,500	2,059
1966-67—			
Gross	..	30,00,000	30,94,348
Net	..	15,00,000	8,59,967
No. of C.T.D. Accounts	..	2,500	1,247
1967-68—			
Gross	..	30,00,000	33,40,456
Net	..	15,00,000	4,84,335
No. of C.T.D. Accounts	..	1,100	1,112
1968-69—			
Gross—(Revised to 100 lakhs)		30,00,000	41,70,553
Net—(Revised to 50 lakhs)	..	15,00,000	15,19,973
No. of C.T.D. Accounts	..	1,100	1,189
No. of P.O.S.B. Accounts	..	2,000	2,262
No. of Five-Year Fixed Deposit Accounts	..	..	1,133

Currency and Coinage

The old Hyderabad State had a full-fledged currency system of its own called the Osmania Sicca currency (O.S.). A mint was established at Hyderabad for the manufacture of coins for

circulation. All the currency notes of the State were, however, printed at the Government Security Printing Press, Nasik, with the exception of one-rupee notes, which were printed at the Government Press at Hyderabad. The denominations of coins in the old Hyderabad State were one rupee, eight annas (half a rupee), four annas (one-fourth of a rupee), two annas (one-eighth of a rupee), one anna (one-sixteenth of a rupee) and one paisa (six paisas=one anna). The denominations in currency notes were of one, five, ten, hundred, five hundred, thousand, and ten thousand rupees.

The exchange rate between the Hyderabad State currency and that of Indian Government currency was fixed at one hundred Indian rupees as equivalent to rupees one hundred and sixteen, ten annas and eight pies of that of Hyderabad. In the interest of uniformity in the currency system of India, the Hyderabad State currency was gradually withdrawn from circulation and later demonetised completely. The Hyderabad Government currency notes and coins ceased to be legal tender in 1955. Conversion was, however, allowed at banks and treasuries upto 31st March 1956. The decimal system was introduced in the district along with the rest of the country from 1st July 1957.

B—Trade and Commerce

Course of trade

Before the advent of the modern era, a barter system was followed to some extent. Mainly, agricultural commodities grown in a particular area were given in exchange for other requisites. This gave an impetus to send surplus agricultural produce to places outside the district, making use of country carts. Communications were undeveloped in those days and what existed as roads connecting important places were made use of for purposes of trade. The rural producers, who were in the habit of growing just what they needed, slowly transcended the stage of self-sufficiency and found out new avenues by which they could barter their goods or sell them for value. The Bahmani rulers who held sway in Raichur helped to develop certain cottage industries and made their products popular elsewhere. Fine muslin fabrics found their way to other places in South India. The Deccan area, which included Raichur, had connections with the west coast ports and the large rivers were forded during off-monsoon days. The surplus produce was sent far beyond the confines of the district and naturally, the producers had to wait for days to get their returns. It was indeed a gamble in trade in those days. Trade was confined only to certain classes of goods, as the needs of the people were limited to the necessaries of life. The wants were locally satisfied and as the villages were self-sufficient, the people did not care much for imports and exports. The outward trade was confined only to surplus products.

The introduction of railway routes in the latter part of the nineteenth century opened up vast opportunities for trade and commerce. Surplus agricultural produce like cotton, jowar, oil-seeds and cash crops found their way to the north and finished goods like cloth, *kirana* goods and the like flowed into the district. A stage was reached when it was necessary to regulate this in and out flow of trade through markets which have shaped themselves into modern clearance houses of commerce. Raichur became a place of congregation for buying and selling any kind of article, agricultural or otherwise, and soon became a trading centre. All the pre-requisites of a daily bazaar or weekly bazaar, *mela* or annual fair, *monda* or auctioning market place, and *guni* or general market or grain market developed in the district.

Exports and Imports

The important commodities which are now exported from Raichur district are cotton, oil-seeds, groundnut oil, pulses and cereals. As there are no textile mills in the district, all the cotton is pressed into bales and exported to Sholapur, Coimbatore, Bombay and other cities. It is estimated that approximately 85,000 bales of kapas are pressed and exported in a year. Groundnut oil is exported to Poona, Bombay and other places. The Koppal area is the main groundnut growing region and the Koppal town is a trading centre. About thirty per cent of the groundnut is crushed and the oil is exported to the northern areas. Oil-seeds are exported to Gadag and Bijapur. Raw hides and skins go to Hospet and Gadag. Raw wool is exported to Wadi and Hulkoti. The surplus jowar is also exported to places outside the district. The other items of exports are rice, ghee, castor seeds, horns and hooves of animals, salt, *karad* oil and other minor items.

The imports relate to cotton yarn for handlooms, silk yarn, artificial silk yarn, leather, blankets, tobacco, beedi leaves, timber, vanaspati, coconuts, jaggery, pulses and cereals. The district depends, to a large extent, on imports arranged by wholesalers in respect of its daily needs. The volume and value of exports and imports cannot be estimated correctly as there is no centralised system in existence to work out these figures. It is only in the regulated markets that some idea can be gained of the extent of trade and an account of this is given in the course of this chapter.

Raichur is the principal trade centre in the district and has a modern market yard called the *gunj*, where there is a statutory supervision over trade. Koppal is another trade centre for cotton, groundnut, jowar, tamarind, chillies and hand-loom fabrics. Gangavati is an important trading centre for groundnut, paddy, jowar, jaggery, castor seed, bajra and *kangani*. The other centres are Kushtagi, Yelburga, Kuknur, Kinhal, Sindhanur, Manvi, Lingsugur, Tawargera, Mudgal, Maski, Deodurg, Hanamsagar and Jalhalli. There are four regulated markets in the district,

located at Raichur, Koppal, Gangavati and Kushtagi. There are also five sub-markets which are located at Kanakgiri, Bhanapur, Kinhal, Ginigera and Bevoor.

Fairs and Melas

Fairs, *melas* and shandies are held in several places all over the district, when trade is carried on in an unregulated way. The Adaviraya Jatra at Kushtagi on Vyasa Poornima day is an important trade fair. The *urus* of Shah Hamid Wali at Tawargera is another notable fair. The fairs at Ningalbanda, Dotihal and Mundnur are also important from this point of view. There are also some important *melas* held annually in Gangavati taluk. Important weekly shandies are held on particular days of the week in about 70 villages like Kinhal, Hittanhal, Gondbal, Munirabad, Bhagyanagar, Ginigera, Hanamsagar, Harinamapur, Tawargera, Venkakunta, Dotihal, Kurdi and Mundnur in the district. Besides these places of trade, each urban area has got a wholesale *mandi*, a retail bazaar and small shops where the daily needs of the citizens are met. (*See* also Appendix for shandies).

A brief account of the conditions that existed at Raichur prior to the starting of the market yard may not be out of place here. The whole of the present Kirana Bazaar lane and the Nalband lane in the vicinity of Somwarpet was converted into a shopping centre, where the *adatiyas* (commission agents) and the buyers gathered to transact business. Throughout the day, these bazaars remained busy and congested, with the result that normal life became difficult. The bazaar was full of carts and other vehicles and pedestrians. As the sellers sold their commodities at different points, prospective buyers had no chance of prior inspection. The traders exacted a portion of the commodities particularly groundnut, free of cost, for sample inspection. It was the usual practice with the *adatiyas* to fill in a greater quantity than the actual weight and over and above the usual allowance in every bag. But generally the *adatiya* took out this extra quantity for himself and kept the bags ready for delivery after adjusting them. The loss to the seller was to the tune of six seers in a palla of 120 seers on an average. Equally exacting was the allowance on cotton. The tare weight of the wrapping of cotton was most arbitrarily deducted from the net weight in spite of the fact that the wrapping itself was obtained by the buyer free of cost.

Incidental charges also varied from transaction to transaction. Added to all these shortcomings, the daily transactions in the old days were taking place in the Indian currency, whereas the producers had to pay the land revenue in the Osmania currency. The *adatiyas*, who acted as middlemen, profited much by these variations in the exchange rate. Defective weights and measures, giving of samples free of cost, unwarranted and undefined market charges, adjustment of sale proceeds towards

the past debts and the general collusion of commission agents with the buyers adversely affected the interests of the producers in the Raichur market. To save the agriculturists from the clutches of this exploitation, the Government of Hyderabad made the Hyderabad Agricultural Markets Act applicable to Raichur in 1934. From that date, a new era dawned and the sellers had a fair chance of getting a reasonable return for their produce.

Establishment of Gunjs

The development of trading centres resulted in the setting up of general markets (called *gunj*) at important places in the district, and in Raichur town the establishment of a market yard, called the Mukarram Gunj, was a milestone in the progress of trade and commerce. A *gunj* is a large market with godown facilities, shopfronts and offices, where wholesale business in grains, pulses, oilseeds, etc., is carried on all the year round. It is generally square-shaped, each side of the quadrangle having a gateway. A wide pavement of bricks or stones in front of the shop-rows provides easy means for transporting, unloading, sampling, cleaning and weighing of commodities. Facilities are provided within the quadrangle of the *gunj* for water for men and animals.

The development of the Mukarram Gunj between the years 1934 and 1940 helped towards the growth of regulated trade. The *gunj* has two distinct sections, one for cotton and the other for grains. The grain market is rectangular in shape and consists of blocks. The market place is divided into four quarters by two main roads, 80 feet wide, cutting each other at right angles in the middle of the market. At the cutting of these roads, is located the Market Committee office. Each quarter of the market has three blocks of shops and godowns. Each block contains rows of shops with a platform for the handling of produce. Behind the shops, there are godowns for storage of grains. The size of each godown is 20 by 60 feet. Separate godowns have been allotted for cotton. The godowns, stores and shops are all well built. Electric lights, water taps and troughs, 'cooly' sheds, watchmen's quarters and lavatory have also been provided.

Raichur Market Committee

The Market Committee, Raichur, having assumed control of the market, realised that it was not possible to exercise supervision over the transactions of traders unless a regular market yard (*gunj*) was established. Therefore, a proposal in this behalf was actively pursued with the co-operation of the Municipal Committee. Alongside, the traders were registered and bound by the conditions of the agreement prescribed, and other market functionaries were licensed. There was no Weights and Measures Act in force, and the only medium for the supply of weights and measures was a contractor who enjoyed the exclusive privilege. The weights and measures were not reliable, and were

often adjustable to the advantage of the traders. The Market Committee, therefore, ordered for a standard balance to test the unit of weights. The unit of weight (*tola*) being fixed with the help of this machine, larger standard weights were prepared to check the weights used by the traders. Due to non-availability of new weights made of iron, or rather due to the opposition of traders to buy such weights, the stone weights in use were tested and corrected and punched to represent their intrinsic weights. The measures in the market were checked and certified for uniformity. A Market Superintendent and a clerk with peons were employed for the day-to-day administration and supervision of the market.

By 1937, the construction of the *gunj* with the grain and cotton markets and office buildings was completed and many of the traders had constructed their own shops and godowns. The transactions of the market were, therefore, shifted to this area. The shifting of transactions from an old and established centre to any new place, has always been a difficult problem and the Market Committee and the Municipality of Raichur had to face several difficulties. It was not before 1950 that the process of this change was completed. The *gunj* is an ideal one in plan and construction, and provides necessary amenities both to the seller and the dealer.

Improvements

The provision of comfortable shops for the *adatiyas* (commission agents) and the buyers, with godowns close by, and timely auctions resulted in higher prices for the cultivators' produce. By this time, the traders had been prevailed upon to replace their stone weights by standard iron weights, and the Market Superintendent was able to watch and check weighments effectively. The strength of the staff of the Market Committee was increased, and the collection and compilation of market information was facilitated. The rate of *adat* or commission was reduced, and the payment in kind to the *hamals* was stopped by fixing a cash remuneration for their work; the practice of taking sample free of cost was discontinued; arbitrary deductions were prohibited, though some of the customary allowances were permitted for the time being. The commission agent could no longer collude with the buyer in the settlement of allowances or deductions for dirt, impurities, moisture, difference or deviation from the sample or average standard. The settlement of such disputes was committed to the Market Superintendent, Arbitrators and the Committee, and the agent was prohibited from acting on behalf of both the seller and the buyer in one and the same transaction. He had to issue a sale-slip or *takpatti* giving details like seller's name and residence, buyer's name, name, quantity and price of the commodity sold, the marketing charges deducted and the actual amount paid to the seller. The counterfoil of every such slip had to be punctually tendered to

the office of the Market Committee on the day following the transaction. The agent was not allowed to appropriate the sale proceeds towards debts without the consent of the seller.

The spade work of regulation of transactions continued during the six years following 1940; the system of sales was improved, the charity fund was controlled, and the Co-operative Agricultural Sales Society in the *gunj* was reformed. There were also the war-time price controls and restrictions on export of agricultural commodities. Prior to 1941, the rates of cotton and groundnuts were fixed by auctioning 50 per cent of the day's arrivals to the highest bidder. As few buyers could afford to purchase 50 per cent from the arrivals of these commodities, there was absence of competition in the auctions, resulting in the dictation of rates by some magnates of the market. The Market Committee, therefore, introduced the present system of auctioning the arrivals with the *adatiyas* of each of the 15 plots in the *gunj* separately, leaving one plot to be auctioned in individual heaps or packages of groundnuts and cotton. This system gave average buyers the chance to purchase in the auction, assuring the sellers the advantage of competitive prices. In the 16th plot, the agents were allowed, turn by turn, to auction these commodities to enable small buyers to meet their requirements.

Charity Fund

The Market Committee sought the co-operation of the *adatiyas* and buyers in the organisation of the charity fund under its direct supervision. The sellers and the buyers were made to contribute, each at 6 pies per cent *ad valorem*, towards the charity fund to be collected through the *adatiyas* and credited in the office of the Committee. This fund was managed by a sub-committee appointed for the purpose. The annual budget was approved by the Market Committee and grants were allotted in aid of educational institutions and for other social amenities at the discretion of the Committee. The collections of this fund were to the tune of Rs. 20,000 per year, the account being kept in the State Bank and operated by the Chairman of the Committee.

In the early years, the finances of the Market Committees could not cope with the then war-time conditions when the salaries of employees had not only to be improved but also, due to the increased scope of activities in regulated markets, the number of staff had to be increased. The Government, therefore, permitted the Market Committees to collect market fees at ¼ per cent *ad valorem* from sellers, in preference to the fees collected on cart-load basis, as was done previously. This was brought into effect in October 1947 at Raichur due to which the annual income went up from Rs. 20,000 to Rs. 1,00,000 in this market. In recent years, efforts have been made further to consolidate and increase the income. Out of the central fund pool created

by the Market Committee, facilities for audit were initiated to help the Marketing Officer in improving the tone of transactions.

Safeguards to sellers.

An important reform introduced in the market was the abolition of the allowance of 1½ seers per bag of groundnuts that the buyers used to obtain from the sellers. The practice of *badwani* or refraction test applied by the buyer to groundnut bags purchased at the time of delivery was also discontinued. If the tested bags were found to contain dirt, earth or stones beyond 1½ seers in weight the *adatiya* was made to pay for the difference. In order to safeguard against such deductions or payment of difference, the *adatiya* used to fill in an additional quantity or make an equal deduction from the produce of the seller at the time of weighment. It was only in about 25 per cent of the cases that the deduction was claimed by the buyers, and paid, and generally this quantity obtained by the *adatiya* over and above 1½ seers per bag of groundnuts was appropriated to his own account. The abolition of the allowance and refraction test of groundnuts saved the seller from the loss of six seers per *palla*. It may be mentioned here that groundnuts form about 60 per cent of the arrivals in the market.

With the consolidation of its finances, the Market Committee was able to grant large sums for the construction of roads, for better water facilities and for the extension of electrification in the *gunj*.

Other mofussil trade centres

Among the other markets of importance in the district is the trading centre of Koppal. It is estimated that nearly four lakhs of bags of groundnut are received every year in this centre. Bhanapur, a sub-market of the taluk, is also an important trade centre. Nearly one lakh of bags of groundnut is recorded here as arrivals. Kinhal, famous for its toys, is also a sub-market for wholesale business in jaggery. Small arrivals of groundnut are also recorded here. The groundnut which arrives in Kinhal is open for wholesale business and a quarter of it is crushed and made into oil and exported to Poona, Bombay and other places. Groundnut seeds are sent to Bombay and Andhra Pradesh and oilcake to places in Tamil Nadu. Among the other commodities received in the market here are castor seed, *karad* seed, jowar and wheat, of which the last two are locally consumed. Important retail marketing centres in the area are Kinhal, Munirabad, Alawandi, Hittanhal, Katarki and Bisarhalli.

Another important trade centre is Gangavati, which is also famous for groundnut, paddy and jaggery trade. About 80,000 quintals of groundnut, 50,000 quintals of paddy and 60,000 quintals of gur are the estimated arrivals per year at this market. Arrivals also include bajra, moong and castor seed. In this area, there is one wholesale *mandi* at Karatgi. Yet another important

groundnut market is at Kushtagi from where seeds are exported by lorries to Raichur for oil production. The distance between Kushtagi and Raichur is 101 miles. Sindhanur and Manvi also have important *mandies*. These places have been developed considerably as a result of irrigation facilities provided by the Tungabhadra Project. Manvi is noted for groundnut and Sindhanur for cotton, paddy and groundnut. Hanamsagar, Hireramapur, Tamarpura, Wankalkunta, Potanhal, Mudenur, Mardi and Manjelur are the other important wholesale *mandies*.

Regulated Markets

The main object of establishing regulated markets is to ensure to the agriculturists a better price, proper weighments and relief from collection of illegal fees. These markets are providing also essential facilities and amenities to the cultivator-sellers coming to the markets, such as market yards, water facilities, good roads, etc.

The then Government of Hyderabad had taken steps in the direction of providing marketing facilities and had enacted the Hyderabad Agricultural Markets Act, 1934, with a view to ensuring a fair price to the agriculturists. The provisions of this Act were gradually made applicable to several important marketing centres in the district. The Mysore Agricultural Produce Marketing (Regulation) Act, 1966, which repealed the different enactments in the State, came into force on May 1, 1968. The following regulated markets and sub-markets are at present functioning in the district:—

Regulated Markets

1. Raichur
2. Koppal
3. Gangavati
4. Kushtagi

Sub-Markets

1. Bhanapur under Koppal market
2. Kinhal under Koppal market
3. Ginigera under Koppal market
4. Kanakgiri under Gangavati market
5. Bevoor under Kushtagi market

Out of the four markets, Raichur and Gangavati markets are in the Tungabhadra Project ayacut area. The number of regulated markets is small considering the area of the district and its potentialities. The average number of villages for one market (taking into consideration the sub-markets also) works out to

about 170. The other important centres of trade which are yet to be regulated are Sindhanur, Manvi and Karatgi, all of which are in the ayacut area, and necessary steps are being taken in this direction. The proposal is to have regulated markets at Sindhanur and Manvi and a sub-market at Karatgi. The preliminary notifications for the regulation of Sindhanur and Manvi markets under the Mysore Agricultural Produce Marketing (Regulation) Act, 1966, have already been issued. Proposals for the establishment of a regulated market at Lingsugur with sub-markets at Mudgal, Maski and Jalhalli have also been submitted.

Arrivals

As a result of various measures undertaken with a view to improving the economic conditions of the people under successive Five-Year Plans in general, and increased irrigational facilities provided by the Tungabhadra Project in particular, there have been marked increases in the arrivals of produce at the markets. The quantity of paddy which arrived at Raichur was 20.583 quintals in 1958-59 and it went up to 82,901 quintals in 1967-68. The figures in respect of cotton (kapas and lint) and groundnut were 2,10,419 quintals and 3,39,031 quintals for the year 1958-59 and 2,88,805 quintals and 2,94,164 quintals respectively for the year 1967-68.

Agricultural Market Committee, Raichur

As already stated earlier, the Raichur Agricultural Market Committee was established in 1934. It is one of the biggest markets in South India. The particulars of arrivals of some of the important commodities at the Raichur Market for the years 1957-58, 1961-62, 1965-66 and 1967-68 are as given below :—

Sl. No.	Name of commodity	1957-58	1961-62	1965-66	1967-68
			(In quintals)		
1.	Groundnut ..	3,49,831.36	1,34.740	3,08,223	2,94,104
2.	Jowar ..	17,625.00	1,19,370	7,781	45,674
3.	Bajra ..	18,960.45	67,514	7.234	25,842
4.	Paddy ..	1,412.08	55,345	19,156	82,901
5.	Kapas ..	1,63,845.92	1.21.087	2,15.161	1,01,501
6.	Lint ..	52,784 64	92.871	72.280	47,675
7.	Cotton seed	24,198 72	48,788	47,588	7,136
8.	Tur ..	4,195.52	8.978	8,000	5,705
9.	Castor seed ..	5,984.00	4.349	1,604	1,512

The particulars of income of this Market Committee for the years 1957-58, 1965-66 and 1967-68 were as given below :—

Year		*Market Fees*	*Licence Fees*	*Miscellaneous*	*Total*
			(*Amount in Rupees*)		
1957-58	..	1,22,217—65	8,045—00	2,979—19	1,33,241—84
1965-66	..	1,98,489—83	8,850—00	26,717—98	2,34,057—81
1967-68	..	2,65,918—22	11,040—00	45,935—35	3,22,891—57

Agricultural Market Committee, Koppal

The Hyderabad Agricultural Markets Act was brought into force in the Koppal trade centre in the year 1948. The market area originally included all villages within a radius of five miles from the Division Office, Koppal, and it was extended to all villages lying within nine miles with effect from 1950.

The particulars of important arrivals of commodities (in quintals) at this market for the years 1957-58, 1961-62, 1965-66 and 1967-68 were as given below :—

Sl. No.	*Name of commodity*		1957-58	1961-62	1965-66	1967-68
1.	Groundnut (pods)	..	39,071	50,807	40,830	34,008
2.	Groundnut (gungru)	..	1,850	3,993	13,939	20,923
3.	Castor seed	..	256	830	769	2,417
4.	Wheat	..	1,541	1,244	1,815	814
5.	Jowar	..	821	891	476	28,208
6.	Bajra	..	414	1,766	210	793

The particulars of income of this Market Committee for the years 1957-58, 1965-66 and 1967-68 were as given below :—

Year		*Market Fees*	*Licence Fees*	*Miscellaneous*	*Total*
		Rs. P.	Rs. P.	Rs. P.	Rs. P.
1957-58	..	23,051—00	5,069—00	734—10	28,854—60
1965-66	..	29,581—40	5,166—00	6,254—75	41,002—21
1967-68	..	35,651—72	5,813—00	5,595—58	47,060—30

Agricultural Market Committee, Gangavati

The Gangavati Agricultural Market Committee was established in November 1953. Its jurisdiction included all villages within a radius of ten miles from the taluk office, and the Kanakgiri Panchayat area was also included in its jurisdiction

in the year 1957. At present, the entire taluk is covered by it. The particulars of arrivals of important commodities at the market (in quintals) for the years 1957-58, 1963-64, 1965-66 and 1967-68 were as follows :—

Sl. No.	*Name of commodity*		1957-58	1963-64	1965-66	1967-68
1.	Groundnut	..	51,675	44,253	62,791	80,045
2.	Jaggery ..	..	42,984	66,368	1,13,610	56,993
3.	Jowar ..	..	1,184	3,316	5,090	12,890
4.	Bajra ..	..	1,047	1,002	998	4,310
5.	Kangani ..	..	1,301	2,075	567	2,299
6.	Cotton seed	..	721	441	1,548	420
7.	Castor seed	..	604	1,810	910	4,490
8.	Paddy ..	..	1,522	2,14,420	89,630	55,770

The particulars of income of this Market Committee for the years 1957-58, 1965-66 and 1967-68 are shown hereunder :—

Year		*Market Fees*	*Licence Fees*	*Miscellaneous*	*Total*
		Rs. P.	Rs. P.	Rs. P.	Rs. P.
1957-58	..	12,601—41	3,123—00	351—13	16,075—04
1965-66	..	47,533— 44	3,912—00	18,909—10	72,354—54
1967-68	..	95,767—59	10,620—00	1,75,685—04	2,82,072—63

The Agricultural Market Committee, Kushtagi, was established on 6th January 1958. There is also a market yard at Bevoor which is working under the supervision of the Kushtagi market. The distance between Kushtagi and Bevoor is fifteen miles. The market area covers the entire taluk of Kushtagi. The particulars of arrivals of commodities (in quintals) for the years 1963-64, 1966-67 and 1967-68 were as given below :—

Agricultural Market Committee, Kushtagi

Sl. No.	*Commodity*		1963-64	1966-67	1967-68
1.	Jowar	..	2,126	606	1,967
2.	Bajra	..	358	232	684
3.	Kangani	..	42	70	339
4.	Kulthi	..	200	1,033	534
5.	Ballar	..	33	89	5
6.	Groundnut (gungru)	..	135	2,796	8,455
7.	Groundnut (Madras)	..	4,345	8,595	..
8.	Castor seed	..	965	1,380	703
9.	Karad	..	74	403	234

The particulars of income of this Market Committee for the years 1966–67 and 1967–68 are given below :—

Year		*Market Fees*	*Licence Fees*	*Miscellaneous*	*Total*
		Rs. P.	Rs. P.	Rs. P.	Rs. P.
1966–67	..	3,671.40	2,750.00	57.06	6,478.46
1967–68	..	4,733.97	3,085.00	86.67	7,905.64

Out of the four regulated markets, the Raichur Market has got a well-built separate *gunj* (Rajendra Ganj). The Market Committee, Gangavati, has also got a market-yard of its own covering an extent of about 41 acres of land. The Market Committees of Koppal and Kushtagi have also taken necessary steps in this direction. The Market Committees have also undertaken several developmental works, such as construction of roads in the market-yards and approach roads, construction of office buildings, staff quarters, guest houses, raiyat bhavans, canteens and cattle sheds, etc., provision of water, electricity and library facilities and erection of auction platforms and compound walls.

Open auction system is prevalent in all the regulated markets. Correct weighment is done by the weighmen employed by the Market Committees. The daily market rates of important commodities are sent to the Senior Marketing Inspector, Dharwar, for broadcasting from the Dharwar Station of the All India Radio. Besides, the daily rates are announced on loud-speakers and also published on the black-board for general information. Under a Market Intelligence Scheme, weekly wholesale and retail prices are collected and furnished to the authorities concerned.

Grading

Grading is important both from the point of view of the seller and the buyer. The Market Committee of Raichur has already introduced the commercial grading of groundnut and paddy, and the eye-sight grading of cotton. Recently, grading of cotton on ginning percentage has also been taken up. Raichur will soon have a grading unit of the Marketing Department. The State Government selected Raichur as one of the centres where grading of cotton on ginning percentage has to be undertaken. Sanction has already been accorded for the establishment of an oil-grading laboratory at Raichur with sub-packing stations at Gulbarga and Bellary. It has also been proposed to establish primary grading units at Gangavati and Koppal for grading groundnut and jaggery.

Warehouses

Provision of proper storage facilities should form a part of any programme under marketing. The Mysore State Warehousing Corporation was established in November 1957 and it started functioning in 1958. Since then many warehouses have been provided in the State. Private traders, co-operative institutions and agriculturists are allowed access to these warehouses. At Raichur, a warehouse was started on 1st December 1958 with an initial storage capacity of 100 tonnes in hired premises. Later, the Corporation purchased a site with a view to constructing godowns with modern storage facilities with a capacity of 2,000 tonnes. The construction of the sections was completed in the year 1961 at a cost of about Rs. 3,40,000. At present, the State Warehousing Corporation has three godowns at Raichur with a total capacity of 5,000 tonnes. They are looked after by a Warehouseman, a technical officer working under the direction of the State Warehousing Corporation, Bangalore. There are two more warehouses of the Corporation in the district, one at Koppal and the other at Gangavati. They are located in hired premises.

Those who desire to use the godowns have to pay a storage fee, which covers insurance premium against loss, cost of pesticides and watch and ward. The first priority for storage is given to agriculturists who are directly in need of proper storage facilities. In the godown itself, foodgrain bags are stocked in a systematic way. Pests are the worst menace in the godowns. Harmless chemicals are sprayed to ward off the insects. Apart from storage facilities, there are other benefits derived by the farmers. The warehouse receipt is recognised as a valid document in banks for getting easy credit facilities. About seventy-five per cent of the total value of goods deposited is given as loans by the banks and a reasonable rate of interest is charged on these loans. The technical staff, who are managing these warehouses work in close co-ordination with the marketing authorities, co-operative institutions and banking establishments.

The idea behind these warehouses is to draw as much of the produce as possible during the harvests and stock it in proper, pest-free storage houses. Users of these warehouses are allowed to change the title by a system of recognised transfer documents, without the difficulty of transportation from seller to the buyer. Even sales are effected on the strength of warehouse receipts. The arrivals in the godown are properly graded and weighed or measured and all the particulars entered in the receipt. This facilitates traders to sell their goods without recourse to recurring weighments and exhibition of contents. There is no need to examine the samples or to scrutinise the standardisation. It is also expected that by the increasing use of these godowns, hoarding and profiteering and the creation of artificial scarcity will decline before long. A stable price unhampered by unsocial

tendencies is the logical concomitant of the storehouse idea. Grading of storage produce is also one of the essential principles of a warehousing policy. This is done according to principles of standardisation and qualitative analysis. Efforts are being made also to inculcate the idea of qualitative standardisation into the minds of the cultivators so that they might get higher rates for their produce. An advisory committee consisting of representatives of the regulated market, co-operatives, cultivators, traders, banks and leading members of the public has been set up to popularise the scheme. There is a proposal to set up larger godowns with a capacity of 10,000 tonnes. It is intended to locate these godowns as near the *gunjs* as possible so as to enable producers and traders to fully utilise the benefits of the scheme.

Trade Associations

There are many associations of traders and merchants connected with different trades, industries and business at the centres of trade in the district. The more important among them are the following :—

1. The General Merchants' Association, Raichur.
2. Grains and Kirana Merchants' Association, Raichur.
3. The Cloth Merchants' Association, Raichur.
4. The Tailors' Association, Raichur.
5. The Printing Press Owners' Association, Raichur.
6. The Koppal Merchants' Association, Koppal.

Most of such associations are formed with a view to bringing about closer co-operation amongst the members of the trade or industry concerned, to chalk out and follow a common policy and to devise ways and means of further promotion of their business. Often disputes among the merchants of the trade are referred to these associations for amicable settlement.

Weights and Measures

The regulation of weights and measures in the Raichur district was based on the Hyderabad Weights and Measures Act, 1946, which came into force in the area on 1st March 1950. After the States Reorganisation in 1956, when the district formed part of the new Mysore State, the same statute was being continued together with the rules. The bullion transactions in the district were done using the *tola, val* and *rathi* as units of weights. These bullion weights were the same as the Bombay bullion *tola* of 180 grains (*kaldar*), *val* and *rathi* weights. The traders in the area followed two kinds of weights, the seer and *tola* weights and the pound avoirdupois weights. Any trader found using false weights was liable to be punished under the law. A seer was equal to 80 *tolas* and a maund to 40 seers. A *palla* was equal to three maunds, and 20 maunds made one *khandi*. A *masha* was 1/12th of a *tola* and a *chatak* was 1/16th of a seer.

The traders of consumer goods like coffee, tea, tobacco and condiments followed the pound avoirdupois weights in preference to the traditional *tola*. Modern weighing machines were used to determine the correct weight. In wholesale markets of a fairly high turnover, all foodgrains were determined in tons for purposes of export. The internal arrivals were determined by maundage. Dealers in cotton, cloth, metals, etc., followed the pound avoirdupois weights.

In the category of measures, the seer was the base. One maund was equal to 40 seers and a *palla* was equal to 120 seers in the district. Measures of half-a-seer and one-fourth of a seer were also used. In the day-to-day transactions of the retail bazaar, the *chatak*, the *adholi* and the *pyali* were also used. The *chatak* was equal to 1/16th of a seer and an *adholi* was equal to two seers and a *pyali* was equal to four seers. Some of the liquids were measured by the imperial gallon where a pint was determined as 1/8th of a gallon. In the bars and liquor shops, the peg and the dram were the accepted standards.

The standard of length used in the district was the same as elsewhere, namely, foot, yard, furlong and mile. The area was measured in guntas and acres (one gunta was equal to 120 square yards and one acre was equal to 4,840 square yards).

But, with the introduction of the Mysore Weights and Measures (Enforcement) Act, 1958, and the rules issued thereunder, in the State, uniform metric system of weights and measures has been brought into vogue in the district. The Act repealed all other systems of weights and measures giving place to metric system using kilogram for weight, litre for measure and metre for length. The use of old weights like *tola*, seer, maund, *khandi*, pound, pint, etc., has been declared illegal in trade and commerce. The State Government has taken all steps to educate the people about the advantages of the metric system of weights and measures, through propaganda and publicity.

CHAPTER VII

COMMUNICATIONS

Old-time trade routes

A system of roads, effectively linking the different parts, is the base on which the economy and prosperity of a particular region can be built. As far as Raichur district is concerned, it may be said that the road system is yet far from satisfactory. Recorded observations of the old -time routes are scarce and exactly what facilities there were during the Vijayanagar period or during the later period, it cannot be said with certainty. There is no trace of the old highways, because of the ravages of war and feuds. Historians and travellers of those days speak of an abundance of trade between the west coast ports and their hinterland. This trade development would not have been possible if there were no roads as such. Roads there must have been between the port of Goa and the capital of Vijayanagar kingdom. Merchandise was transported on beasts of burden to the hinterland as far as Warangal. This speaks of the existence of roads in those days. Later, the meagre communications, which existed, also ceased to be there because of internecine wars on the Deccan plateau. Indeed, there was no good road communication between Raichur district and the adjoining districts of Dharwar and Bijapur till a few decades back. Instead of roads, there were tracks, allowing of some type of communication between important places of one district with those of the other. (The tracks used to be roads much earlier and because of the ravages of time, the communications deteriorated). In the twenties of this century, buses were introduced and they used to ply on country cart-tracks during fair weather.

The first early road to be laid across the Raichur district country-side was the Raichur—Lingsugur road, east to west, on the black cotton soil. Perhaps, this was the only road in that part of the country which afforded access to the district headquarters town. Later on, as the people clamoured for more facilities, the district headquarters was connected by roads with Deodurg, Kushtagi, Sindhanur and Manvi.

The pattern of administration of Raichur in those days was also rather an obstacle in the way of constructing long-distance

roads. Raichur, with the rest of the Hyderabad dominion, shared the feudal order of jagirs and *samsthanas* whose small territories had their own different systems of administration. The jagirdars took little or no interest in laying out roads. Fair weather traffic, however, went on uninterrupted even though the roads were bad when compared to any recognised standards. But in the rainy season, the dusty roads became slushy, and made the difficulties of transport worse. Even now, sometimes buses are held up on account of deep slush.

With the progressive implementation of Government's policy of constructing good roads, the people of the district saw some new ventures, but the performance of that task was poor and not upto any known engineering standards. The roads had no bridges or culverts, with the result that during rainy days, they were impassable. The surface was dusty, muddy or slushy. Heavy vehicles could not negotiate them.

Poor standard

Until recently, the district, no doubt, was served by some roads, but they were poor in standard. As the average rainfall in the district is poor and devoid of any heavy falls, the obstruction caused due to slush lasts only for a brief period. But the after-effects of the rainy season bear their impress for many days to come. Wheels turning in deep slush cause ruts and the speed of the vehicle is checked, causing delay and vexation. The increasing number of automobiles and the increasing tempo of transport activity, called for early attention being paid to construction of good roads.

Shady avenue trees were nowhere seen on the roads. The scorching rays of the sun added to the difficulty of the passengers. Before the advent of modern auto-vehicles, all the roads of the district were used by country carts. They used to negotiate distances of 30 to 40 miles in about 12 hours. The roads were laid for the use of these vehicles.

Raichur district lagged behind several other districts of erstwhile Hyderabad State in the field of transport and communications also. The two big rivers, the Krishna and the Tungabhadra, flowing on either side of the district, isolated the doab region and transport and communication with the neighbouring districts were not easy. With the inception of railways, the district was linked with important trade and industrial centres like Bombay and Madras. But as regards the road communication the progress was very slow. Most of the important roads were constructed either for the movement of troops from one place to another or as famine relief works or to serve as railway feeders. The Raichur—Lingsugur road was constructed during the administration of the British Commissioner, about the year 1855 (1244 Fasli) for the movement of contingent troops, formerly

stationed at Lingsugur. The roads from Raichur to Manvi, from Tawargera to Hanamsagar through Kushtagi and from Hanamsagar to Dotihal were constructed in about 1877 (1286 Fasli) as famine relief works. The road between Lingsugur and Kampli was also constructed as a famine relief work during 1876-77. The roads running from Raichur to Yergera, from Deodurg to Raichur, Shorapur and Lingsugur were also constructed during the administration of the British Commissioners.

Describing the state of communication in the district about sixty years back, the Imperial Gazetteer of India (1909) says: "There are altogether 182 miles of roads, of which 84 miles are gravelled, and are maintained by the Public Works Department, the others being ordinary fair-weather roads...... There are 32 fords and ferries on the Kistna, the Tungabhadra and the Bheema at some of which boats are kept, while at others coracles are used for carrying people and goods across." The position in the year 1921 was not much better. The road mileage maintained by the Public Works Department was only 104, *viz.*, Raichur—Lingsugur road (56 miles), Navalkal—Hutti road (23 miles), Raichur—Devarsugur road (12 miles) and Raichur—Yergera road (13 miles)*. After a decade, the total mileage of roads constructed and maintained by the Public Works Department stood at 352. According to the report on the Agricultural Survey, Tungabhadra Project, Raichur District (1932), the particulars of these roads were as given below:—

Sl. No.	*Name of taluk*	*Name of road*	*Length of road* Miles Furlongs	*Remarks*
1	2	3	4	5
1.	Raichur ..	Raichur - Yergera	13 0	From Raichur to Gunjahalli.
2.	Raichur ..	Raichur - Devarsugur	13 0	Upto Devarsugur near the Krishna
3	Raichur, Manvi and Gangavati.	Raichur—Lingsugur	56—2	Upto Lingsugur
4	Lingsugur, Kushtagi and Gangavati.	Lingsugur—Gangavati	60—7	Lingsugur to Chickjantkal near the Tungabhadra.
5.	Gangavati ..	Ginigera—Gangavati	21—5	Ginigera station to Gangavati.
6.	Lingsugur ..	Lingsugur—Sholapur	18—5	Lingsugur to the Krishna *via* Gurgunta.
7.	Lingsugur and Sindhanur	Lingsugur—Sindhanur	30—0	Lingsugur to Sindhanur.

* Hyderabad District Gazetteers (Part II)—1925.

1	2	3	4	5
8.	Manvi and Deodurg	Navalkal—Hutti ..	33—2	Upto old Hutti Gold Mines.
9.	Lingsugur ..	Mudgal—Yalhal ..	10—0	. ..
10.	Kushtagi ..	Tawargera—Kushtagi.	10-0	Tawargera to Kushtagi.
11.	Raichur and Manvi	Raichur—Manvi ..	21—0	Raichur to Manvi
12.	Manvi and Sindhanur	Manvi—Sindhanur	27—0	Manvi to Sindhanur
13.	Alampur ..	Hyderabad—Kurnool	12-1	From the Krishna to the Tungabhadra.
14.	Sindhanur ..	Sindhanur—Karatgi	13—0	Under construction
15	Sindhanur and Gangavati	Karatgi—Gangavati	13—0	Under construction
		Total ..	352—6	

Further, the report says: "Due to black cotton soil tracts through which most of these roads pass, it is difficult to maintain them properly and some of the roads are almost impassable during the rains."

Road policy

The short-sighted policy on the part of the Nizam's State Railway in respect of road development in the State, seems to have been largely responsible for the backwardness of the district in this field. The Road Committee set up in Hyderabad in 1928, was constituted into the Road Board in the year 1941. The function of the Board was to regulate and govern the road policy of the Government by co-ordinating the views of all the departments including the railway. But, strangely enough, the Nizam's State Railway had protested at schemes for the construction or improvement of roads saying that they would affect it adversely. It even used to object to expenditure on roads that would divert traffic from the Nizam's State Railway to other railways operating in the State. "It should not be supposed that there were no occasions when a clash occurred between the Railway and the State in the functioning of the Road Board.... The Government of Hyderabad considered it as its responsibility to achieve some degree of uniformity of road density in the different districts of the State. Raichur is one of the backward districts in respect of roads; and the Revenue Department was of the view that economic development of Raichur district would benefit the State as a whole and depended on the development of roads. The Railway's objection, however, was that road expenditure in Raichur would feed foreign railways and that the money to be spent on Raichur roads was excessive, compared with the expenditure in other parts of the Hyderabad State, which

would definitely feed our own Railway. What it did not appreciate was that the relative excessiveness of expenditure was indicative of the state of utter undevelopment of roads in Raichur ".[1]

The total road mileage under the Public Works Department stood at 577 in the year 1952, out of which about 505 miles were metalled and about 52 miles were of murram, cement-concrete road being of less than two miles. The total road mileage reached to 591 during 1953-54. It was 624 during 1954-55, out of which 551 miles were metalled. The length of cement-concrete road was only one mile and seven furlongs.[2]

Categories of roads

Though remarkable progress has been made in this field in the district after the States' Reorganisation, it still continues to be backward. Of the five categories of roads, classified according to the Nagpur Plan, the National Highways, the State Highways and the Major District Roads form the more important categories. The remaining two are Other District Roads and the Village Roads. The National Highways are very important roads and form the arteries of the country. They connect the State capitals, metropolitan cities and important centres of major activity in the country. They are maintained by the Public Works Department of the concerned State, with the help of the Central Government funds. The State Highways connect district headquarters and National Highways and serve as main channels of traffic to and from the district roads within the State. The Major District Roads link important marketing centres with the Railways, National Highways and State Highways. The Other District Roads connect important market places. The traffic is interrupted on these roads during the monsoon. Approach roads from the main roads to the villages, generally with unmetalled surfaces, form the Village Roads. If we take into consideration the total road mileage under each one of these categories and compare it with the total population and area of the district, it would be easier to know the position of Raichur district as far as road development is concerned. The percentage of area of the Raichur district (which is about 5,436 square miles) to the total area of the State is 7.36, and in 1961 it had 7.66 per cent of the population of the State. But the district's percentage of road mileage to the total road mileage of the State, including the roads under the Taluk Development Boards, in the year 1965, was only 4.16, and this percentage gave only the 15th

1. Nationalised Road Services in Hyderabad by Dr. V. V. Ramanandhan, Reader in Commerce, Andhra University.

2 These figures included the taluks of Alampur and Gadwal which then formed parts of this district.

place for the district in the State.* If we take into consideration the mileage per square mile, it was only 0.25 whereas the average for the State was 0.44. Raichur district had 11.32 miles of roads for a population of 10,000, whereas the State average was 13.79. Out of a total of 818 miles of National Highways in the State, Raichur had 59 miles, that is, 7.20 per cent of the total mileage of the category in the State. And it had a mileage of 334 of the State Highways, which was 8.19 in terms of percentage to the State's total mileage of the category which was 4,072. The district had only 2.43 per cent of the Major District Roads in the State with 191 miles out of the State's 7,890 miles of the category. The percentage in respect of Other District Roads was also only 3.13, the total number of miles for the district and the State being 139 and 4,450 respectively. So far as the Village Roads are concerned, it was 7.16 per cent with a total mileage of 438, the total for the State being 6,118. The grand total of all these five categories of roads was 1,161 miles for the district and 23,348 miles for the State in 1965. And, so, the percentage of the district to the State total was 4.98 in 1965.

As on 31st March 1968, this total mileage for the district had gone up to 1,284, which was only 4.6 per cent of the total mileage of 27,624 in the State. If we take into account the roads under the Taluk Development Boards, the total for the district would come to 1,568 miles (1968). The progress achieved in the district since 1957 upto the end of March 1968 and the particulars regarding surfaced and unsurfaced road mileages along with road mileage per square mile were as follows :—

* Report on the Roads Programme in Mysore State, Directorate of Evaluation, Bangalore, 1968.

Particulars of road mileage in Raichur district as on 31st March 1968

Year	Total road mileage in charge of			Surfaced road mileage	Un-surfaced road mileage	Total road mileage per square mile		
	Public Works Department	Taluk Development Boards	Total			Surfaced	Un-surfaced	Total
1	2	3	4	5	6	7	8	9
1957 ..	554	180	734	475	259	0.08	0.05	0.13
1958 ..	555	189	744	480	264	0.08	0.05	0.13
1959 ..	555	189	744	497	247	0.09	0.04	0.13
1960 ..	663	204	867	501	366	0.09	0.06	0.15
1961 ..	883	..	883	520	363	0.09	0.06	0.15
1962 ..	889	71	960	533	427	0.09	0.08	0.17
1963 ..	965	71	1,036	615	421	0.11	0.08	0.19
1964 ..	987	99	1,086	635	451	0.11	0.08	0.19
1965 ..	1,161	196	1,357	712	645	0.13	0.11	0.24
1966 ..	1,191	184	1,375	742	633	0.13	0.11	0.24
1967 ..	1,219	287	1,506	786	720	0.14	0.13	0.27
1968 ..	1,284	284	1,568	850	718	0.15	0.13	0.28

The category-wise and surface-wise break-up of the total road mileage under the Public Works Department as on 31st March 1968 was as follows :—

Category	*Cement concrete*	*Black-topped*	*Water-bound macadam*	*Un-metalled*	*Total for the district*	*State total*
1	2	3	4	5	6	7
1. National Highways.	..	27—50	31—63	..	59—13	817—88
2. State Highways.	2—75	326—50	31—87	..	361—12	4,158—13
3. Major District Roads.	1—87	95—88	91—37	49—75	238—87	8,686—50
4. Other District Roads.	..	16—38	84—63	45—12	146—13	5,718—12
5. Village Roads.	..	8—00	119—37	351—38	478—75	8,243—12
Total ..	4—62	174—26	358—87	446—25	1,284—00	27,023—75

Among the nine taluks in the district, Lingsugur ranks first in total road mileage with 200 miles while Yelburga stands last with only 99.37 miles. The taluk-wise particulars of road mileage are as follows :—

Taluk-wise particulars of road mileage in Raichur district as on 31st March 1968

Sl. No.	Name of taluk	Total	Cement-concrete	Black-topped	Water-bound macadam	Other kinds of surface	Natural soil
1	2	3	4	5	6	7	8
1.	Sindhanur ..	171.00	..	89.50	17.50	29.25	34.75
2.	Yelburga ..	99.37	..	26.00	35.00	38.37	..
3.	Kushtagi ..	127.00	..	50.25	25.25	45.00	6.50
4.	Koppal ..	158.50	..	42.88	39.37	67.00	9.25
5.	Gangavati ..	125.00	..	49.00	47.00	29.50	..
6.	Manvi ..	161.00	..	74.50	58.00	28.50	..
7.	Deodurg ..	100.00	..	33.00	23.38	43.62	..
8.	Lingsugur ..	200.00	..	69.37	74.62	44.38	11.63
9.	Raichur ..	142.13	4.63	39.75	38.25	49.00	10.50

The total road mileage maintained by the Taluk Development Boards is 283.63, out of which 21.13 miles are of water-bound macadam, 174.00 miles of natural soil and 92.38 miles being of 'other kinds of surface'. No roads are maintained by the Forest Department in the district. The road mileage per lakh of population stood at 143 as on 31st March 1968, taking into consideration the totals of those maintained by the Public Works Department and the Taluk Development Boards.

There are 37 miles of roads under Municipalities, 20 miles under the Community Development Blocks and National Extension Service and one mile under Village Panchayats, the total of all these being 58 miles in the district. In addition to these roads, there are roads completed under the Rural Communication Programme. The total road mileage under this programme is 457 in Raichur district, the total for the State being 12,019 as on 31st March 1968.

Accessibility

In respect of accessibility of roads to the villages, the position in Raichur district is not yet a happy one. Out of a total of 1 514 villages (including uninhabited villages), 614 villages are at a distance of four miles, 183 villages at a distance of eight miles, 68 villages at a distance of 12 miles and 337 villages at a distance of 15 miles from the metalled roads, 157 villages are at a distance of three miles and 107 villages at a distance of five miles from any type of roads.

The number of trees on the road sides is quite meagre. A traveller in search of shade and shelter hardly finds a tree for long distances on many of the roads. However, there are fairly a good number of avenue trees on the National Highways. According to the State Public Works Department, there are 2,685 avenue trees on the National Highways within the confines of the district.

An amount of Rs. 236.12 lakhs has been spent on roads in the district during the seven years from 1961-62 to 1967-68 and the yearwise details are as follows :—

(Rs. in lakhs)

Year		*Original works*	*Repair works*	*Total*
1961–62	..	21.57	4.06	25.63
1962–63	..	24.90	13.87	38.77
1963–64	..	31.32	12.76	44.08
1964–65	..	14.31	13.42	27.73
1965–66	..	24.91	16.36	41.27
19 6–67	..	20.53	20.41	40.94
1967–68	..	9.40	8.30	17.70
Total	..			236.12

Particulars of roads and their mileages in charge of the Public Works Department in the district as on 31st March 1968 are as given below :—

Sl. No.	Name of road	Road mileage in the district	Nature of road surface: Cement concrete	Black-topped	Water-bound macadam	Other kinds of surface	Natural soil
1	2	3	4	5	6	7	8
	I. National Highways						
1.	Kushtagi-Kyadiguppa Road.	12-2	.	..	12—2	..	..
2.	Koppal-Munirabad Road	14—0	..	14—0	..	..	..
3.	Kushtagi-Bevoor-Koppal Road.	32—7	..	13—4	19—3	..	..
	II. State Highways						
4.	Sindhanur-Tawargera Road	25—0	..	25—0	..	..	..
5.	Sindhanur-Dhadesugur Road	12—7	..	12—7	..	..	..
6.	Tawargera-Kushtagi Road.	15—0	..	15—0	.	..	..
7.	Koppal-Yelburga Road	7—6	.	7—6	.	..	..
8	Bhanapur-Bannikoppa Road	9—6	..	4—6	5—0	..	..
9.	Hyderabad-Bangalore Road (Sections A. & B.).	35—0	2—0	23—0	10—0	..	..
10.	Raichur-Lingsugur Road	59—0	0—6	58—2	..	..	..
11.	Lingsugur-Sindhanur Road.	30—0	..	30—0	..	..	..
12.	Lingsugur-Gangavati Road (Sections 1 & 2)	10—0	..	4—3	5—5	..	..
13.	Khanapur-Lingsugur Road.	20—3	..	17—4	2—7	..	..
14.	Mudgal-Bolhal Road	10—3	..	2—0	8—3	..	..
15.	Raichur-Gingera Road (Sections 12 & 13).	111—0	..	111—0	..	..	..
	III. Major District Roads						
16.	Gangavati-Kampli Road.	5—2	..	1—1	4—1	..	..
17.	Koppal-Yelburga Road	17—4	..	17—4	..	..	..
18.	Kushtagi-Hanamsagar Road.	13—3	..	13—3	..	..	..

1	2	3	4	5	6	7	8
	Major District Roads-*contd.*						
19.	Ginigera-Kushtagi-Keralapura Road (Section I).	13—4	..	..	..	13—4	..
20.	Ginigera-Kushtagi-Keralapura Road (Section II).	23—6	..	..	6—0	17—6	..
21.	Yelburga-Sankanur Road.	9—6	..	..	9—6	..	..
22.	Gabbur-Sirvar Road	13—4	..	..	..	13—4	..
23.	Kavital-Maski Road	13—6	..	..	13—6	..	..
24.	Amareshwar Temple Road.	2—2	..	2—2	..	..	..
25.	Local Fund Dispensary Road at Lingsugur.	1—0	..	..	1—0	..	..
26.	Yergeralli-Almapura Road.	6—3	..	6—3	..	..	..
27.	Deodurg-Tintini Road	21—4	..	7—0	14—4	..	..
28.	Deodurg-Shahapur Road.	5—0	..	..	..	5—0	..
29.	Inspection Bungalow Branch Road at Raichur.	0—5	..	0—5	..	..	..
30.	Cement-Concrete Road to Railway Station.	1—2	1—2	..	..	..	..
31.	Cement Concrete Road-Local Fund Dispensary Portion.	0—5	0—5	..	..	..	..
32.	Raichur-Deodurg Road	26—0	..	26—0	..	..	..
33.	Bayalmarchaid-Rajolibanda Road.	11—5	..	..	11—5	..	..
34.	Lingsugur-Gangavati Road	47—2	..	21—5	25—5	..	..
IV.	**Other District Roads**						
35.	Koppal-Katarki Road	4—6	..	0—3	4—3	..	..
36.	Kushtagi-Gajendragad Road.	10—2	..	3—0	7—2	..	..
37.	Gangavati-Anegundi-Munirabad Road.	20—6	..	9—2	11—4	..	..
38.	Siddapur-Ullanur Road.	6—0	..	..	3—0	3—0	..
39.	Venkatagiri-Masalapura Road.	10—0	..	..	..	10—0	..
40.	Koppal-Erkalgad-Chikkamakki-Masalapura Road.	9—4	..	..	..	9—4	..
41.	Bhanapura-Lakmapura Road.	1—1	..	..	..	1—1	..
42.	Bevoor-Masalapura Road.	4—4	..	..	..	4—4	..

1	2	3	4	5	6	7	8
	Other District Roads—*contd.*						
43	Road from Koppal-Yelburga Road to Malimallappa Road.	1—4	..	..	..	1—4	..
44.	Koppal-Kirnal-Ojanahalli Road.	1—5	..	..	..	1—5	..
45.	Road from mile 2/0 of Koppal-Ginigera Road to Gavimath Road.	1—3	..	0—6	..	..	0—5
46.	Bannikoppa-Malakoppa Road.	3—0	..	..	..	3—0	..
47	Bichal-Rajolibanda Road.	16—5	..	..	16—5	..	..
48.	Navalkal-Hutti Road	23—0	..	1—0	22—0	..	..
49.	Sirvar-Manvi Road	11—4	..	..	11—4	..	..
50.	Lingsugur-Harti Road	6—2	..	..	6—2	..	..
51.	Volkart Brothers' Factory to Gunj Road-Raichur.	0—6	..	0—6	..	..	..
52.	Amratlal Road-Raichur	1—0	..	1—0	..	..	..
53.	Road from mile 126/0 to H.B. Road-Station.	0—3	..	0—3	..	..	..
54.	Raichur-Kardi Road .	17—2	..	..	7—0	10—2	..
V.	**Village Roads**						
55.	Kanakgiri-Erkalgad Road.	7—0	..	..	4—0	3—0	..
56.	Mahanapur-Ulmoti Road.	8—0	..	..	..	8—0	..
57.	Balganur-Ayanur Road	10—0	..	..	..	10—0	..
58.	Munirabad-Mallapura Road.	1—4	..	1—4	..	..	..
59.	Kanakgiri-Karatgi Road.	19—0	..	..	6—6	12—2	..
60.	Hanamsagar-Nilagal-Pattadkal Road.	17-6	..	..	..	17—0	..
61.	Yelburga-Bundi Road	9—2	..	..	2—0	7—2	..
62.	Kuknur-Bannikoppa Road.	12—0	..	..	2—0	10—0	..
63.	Hulgi-Hittanhal Road	2—4	..	1—7	0—5	..	..
64.	Egalkera-Budgumpa Road.	3—6	..	3—6	..	..	..
65.	Shivapura-Basapura Road.	6—0	..	..	6—0	..	..
66.	Ilkal-Gajendragad Road.	10—0	..	..	..	10—0	..
67.	Naoli-Kalimargi-Sindhanur Road.	5—6	..	..	..	..	5—6

1	2	3	4	5	6	7	8
	Village Roads —*contd.*						
68.	Hiremannpura-Nandavadgi Road *via* Guddadur and Mudenur.	10—4	..	..	2—6	1—2	6—4
69.	Walbellary Road ..	12—0	..	..	0—7	3—0	8—1
70.	Yelburga-Bevoor Road	12—3	..	..	9—2	3—1	..
71.	Railway Line-Bellapura Road.	0—2	..	..	0—2	..	..
72.	Shivapura-Markandeshwara Temple Road.	0—7	..	..	0—7	..	..
73.	Shivapura-Modhinagar Road.	1—1	..	..	1—1	..	..
74.	Mudalapura-Sugar Factory Road.	1—6	..	..	1—6	..	..
75.	Koppal-Kinhal Road	6—2	..	..	6—2	..	..
76.	Belgatti-Koppal Road *via* Alawandi, Mallanahalli, Hiresindhogi and Hosahalli.	17—0	..	..	..	17—0	..
77.	Dotihal-Hanamsagar Road.	9—0	..	..	0—7	8—1	..
78.	Gorebal-Salgunda Road	7—5	..	..	7—5	..	..
79.	Samalapura-Hunda Road	3—4	..	..	3—4	..	..
80.	Approach Road to Walkamdinni.	1—7	..	..	0—4	..	1—3
81.	Mudgal-Walkamdinni (*via* Balganur) Road.	10—0	..	..	1—5	..	8—3
82.	Road from Odderhatti to Arhol	2—4	..	..	2—4	..	..
83.	Road from Anjanahalli to Mallapuram and on to Sangapura.	4—0	..	..	4—0	..	..
84.	Road from Anjanahalli to join G.A.M. Road at mile 8/0.	1—4	..	..	1—4	..	..
85.	Road from Kampli Branch Road to G.A.M. *via* Hosahalli Village.	2—5	..	..	2—5	..	..
86.	Road from Chikka-Guntakal to Ayodhya.	1—5	..	..	1—5	..	..
87.	Road from Ganjanoor-Kalagundi to join Kampli Branch Road.	2—0	..	..	2—0	..	..
88.	Kavloor-Alawandi Road.	5—0	..	..	..	..	5—0
89.	Kuknur-Kinhal Road	13—2	..	..	..	13—2	..
90.	Gudur-Gajendragad Road.	5—2	..	..	..	5—2	..

1	2	3	4	5	6	7	8
	Village Roads—*concld.*						
91.	Walkamdinni-Ayanur Road.	0—1	..	..	..	..	0—1
92.	Chellur-Karatgi Road	4—0	..	..	..	..	4—0
93.	Hanamsagar-Katapur Road.	4—6	..	0—3	4—3	..	..
94.	Jawalgera-Dhadesugur Road.	15—0	..	..	..	15—0	..
95.	Rajoli-Mathari Road	5—6	..	..	5—6	..	..
96.	Kurdi Feeder Road	3—5	..	..	3—5	..	..
97.	Ashoka Ediot Road	1—2	..	..	1—2	..	..
98.	Krishna River Road	3—5	..	..	..	3—5	..
99.	Kurdi-Matmari Road	7—0	..	..	..	7—0	..
100.	Raichur-Sunnadi-Hunsi Road	8—4	..	..	4—4	4—0	..
101.	Hirekadanka-Bagalwadi Road.	15—2	..	..	..	15—2	..
102.	Pamankallur-Hutti Road.	7—5	..	..	5—0	2—5	..
103.	Gunjahalli-Matmari Road.	8—0	..	..	..	8—0	..
104.	Lingsugur-Chitapur Road.	13—0	..	..	..	13—0	..
105.	Mudgal-Maski Road	15—4	..	..	14—0	1—4	..
106.	Deodurg-Sirvar Road	19—0	..	..	3—0	16—0	..
107.	Mudgal-Nagarhal Road	10—0	..	..	5—0	5—0	..
108.	Approach Road to Taluk Office.						
109.	Manvi Road from Raichur-Ginigera Road.	0—4	..	0—4	..	..	..
110.	Raichur-Arasangi Road.	18—0	..	..	..	18—0	..
111.	Gandhal-Gillesugur Road.	4—0	..	..	..	..	4—0
112.	Mudgal-Mattur-Santikallur Road.	8—5	..	..	..	..	8—5
113.	Deodurg-Koppal Road	7—6	..	..	..	7—6	..
114.	Potanhal-Basapura Road.	14—0	..	..	..	14—0	..
115.	Pamankallur-Maski Road.	9—0	..	..	..	9—0	..
116.	Nagarhal-Chitapur Road.	8—0	..	..	..	8—0	..
117.	Jalhalli-Tintini Road	9—4	..	..	..	..	9—4
118.	Gudur-Ilkal-Nagar Road.	4—0	..	..	..	4—0	..

Rural Communication Programme

A Rural Communication Programme was launched in this State, during the year 1959-60, with a view to providing the villages with a net-work of fair-weather roads. The programme consists of (a) construction of rural roads, (b) linking of existing rural roads and (c) construction of bridges with linear waterway of more than 20′ on roads other than under the Public Works Department. The standard of these roads is of only gravel or earth surface and they are meant mainly for cart traffic. These roads connect the villages to the nearest important roads, market places and rail-heads. There are 1,364 inhabited villages in the district.

In Raichur district good progress has been made in this field. The total mileage tackled upto the end of March 1968 was 537 and the total mileage completed was 457. The mileage contemplated is 562. The year-wise progress achieved from 1962 to 1968 in the district is as given below :—

Year (as on 31st March)		*Mileage tackled*	*Mileage completed*	*Outlay (Rs. in lakhs)*
1962	..	380	49	10.53
1963	..	444	348	14.34
1964	..	459	368	15.01
1965	..	476	415	17.52
1966	..	504	434	18 65
1967	..	529	440	19.73
1968	..	537	457	20.67

The progress achieved in respect of construction of cross drainages for these roads is as given below :—

Year (as on 31st) March		*Number of works tackled*	*Number of works completed*	*Number of works in progress*
1962	..	58	37	21
1963	..	58	49	9
1964	..	58	49	9
1965	..	67	60	7
1966	..	89	81	8
1967	..	91	91	..
1968	..	106	91	15

The Tungabhadra Left Bank Canal has an ayacut of 5.8 lakh acres. The ayacut is spread over six taluks, namely, Koppal, Gangavati, Sindhanur, Manvi, Raichur and Deodurg of Raichur

district. "In particular, the ayacut in both the districts* has very few roads of such a nature and these are vast areas in black cotton soil which do not even have a single road of any classification where, with irrigation, traditional cart tracks are no longer passable. The absence of adequate communication facilities in the ayacut area is one of the main contributory factors for the inadequate development particularly in the black cotton soil which forms nearly 80 per cent of the total ayacut". From these observations contained in "An Outline Project Report on the Investment for the Infrastructure in the Tungabhadra Project Ayacut" prepared by the State Directorate of Evaluation and Manpower, we can have an idea of the importance of roads in the ayacut area. The ayacut roads are meant to link the villages in the ayacut area with marketing centres or with already existing roads leading to marketing centres or with other villages.

Ayacut Roads

In 1950, a scheme for the construction of roads in the ayacut area of the Tungabhadra Left Bank Canal in Raichur district was formulated. The total mileage envisaged was 267. Later, it was decided to take up internal roads also and the proposed mileage was raised to 324. Some of the roads were taken up as envisaged. But, as the cost of construction of these roads was considered as high by the Government, the estimates and the standards had to be revised. Again, the programme suffered due to lack of funds during the period of the National Emergency. It was re-examined in April 1966 The Government decided that the roads in the ayacut area should be constructed as a part of the Project and the roads so constructed should be maintained by the Communications and Buildings Section of the Public Works Department.

A programme to provide the ayacut area with 646 miles of roads at an estimated cost of Rs. 405.20 lakhs was prepared by the Superintending Engineer of the Tungabhadra Canal Circle, to which, the Government gave their approval in January 1968. The roads under this programme are of the Village Road standard. The cost of ayacut roads would be Rs. 73,750 per mile. The taluk-wise particulars of these roads, as envisaged in the programme, phased over a period of ten years, are as given below :—

Taluk		*Number of roads*	*Length of roads M. F.*	*Estimated cost in Rs.*
Koppal	..	10	22—6	3,98,314
Gangavati	..	44	122—1	63,94,324
Sindhanur	..	35	175—3	1,22,48,975
Manvi	..	46	200—7	1,28,88,260
Raichur	..	34	115—0	78,52,811
Deodurg	..	(not decided)	10—0	7,37,500
Total	..	169	646—1	4,05,20,184

*Raichur and Bellary.

This programme includes the completion of roads, which were taken up but left half-done, and the total length of 646 miles includes the length of roads already completed under the earlier programme. Seven ayacut roads of sixteen miles and two furlongs in Koppal taluk, four roads of nine miles and six furlongs in Gangavati taluk and three roads of twelve miles and six furlongs in Sindhanur taluk, in all thirty-eight miles and six furlongs, have been handed over to the Communications and Buildings Section of the Public Works Department for maintenance. Again, six ayacut roads of 12 miles in Gangavati taluk are ready for so handing over; and construction of thirty-seven ayacut roads aggregating to a length of 227 miles is in progress. During 1969-70, it is proposed to tackle about 312 miles of roads at a cost of about Rs. 48 lakhs. The total amount spent so far on ayacut roads is Rs. 65,72,878.

National Highways

Kushtagi—Bevoor—Koppal Road: This is an important road in the district, running for 32 miles and 7 furlongs, out of which 13 miles and 4 furlongs are black-topped and 19 miles and 3 furlongs are of waterbound macadam surface. This road links several important commercial and industrial centres, towns and villages, both within and outside the district. From Kushtagi, the road proceeds further north to join Ilkal in Bijapur district and it leads to Hospet in Bellary district from Koppal. Lebgera, Erkalgad, Bevoor and Kudrimoti are some of the important places served by this road.

Koppal—Munirabad Road: This road links Koppal with Munirabad, the Tungabhadra dam area. It has a length of 14 miles and is black-topped. It is this road which connects Kushtagi—Koppal road with Hospet, an important industrial and commercial centre.

Kushtagi—Kyadiguppa Road: This is a continuation of Kushtagi—Koppal road connecting Kushtagi with Kyadiguppa village. From Kyadiguppa, the road proceeds to Ilkal which is in Bijapur district. The total length of Kushtagi—Kyadiguppa road is 12 miles and 2 furlongs.

These three sections running in the district form a part of the National Highway No. 13 connecting Chitradurga and Sholapur. The total mileage under the National Highway, comprising these three sections, comes to 59 miles and one furlong.

State Highways

Raichur—Ginigera Road: This is one of the most important roads in the district, running for 100 miles and 7½ furlongs towards the south-west of Raichur. This State Highway is considered to be the lifeline of the district. Much of the traffic of the district is done on this long road. It starts from mile number 7 of Raichur—Lingsugur road and ends at Ginigera in

Koppal taluk. Running from one corner of the district to the other, it touches four taluk headquarters out of nine, namely, Raichur, Manvi, Sindhanur and Gangavati. It also forms a part of the Raichur—Bangalore road. The road is black-topped and bridged at all vulnerable points.

This vital link runs almost parallel to the Tungabhadra river, the distance from the river being 8 to 10 miles. The road comes very near the river near Gangavati and then takes a westerly course towards Mugampi and drops towards Ginigera. The road starts from Raichur negotiating a straight westerly course as far as Kalmala and then runs in a south-westerly direction to Manvi. From Manvi, the road passes along Hirekotankal and Jawalgera to Sindhanur. Very near Sindhanur, the road cuts across the Kanakanala stream, a tributary of the Tungabhadra. From Sindhanur, the road again takes a south-westerly course to Gangavati passing across Hirenala stream, another tributary of the Tungabhadra, very near Siddapur. On the last lap of its course, the road negotiates a westerly and south-westerly direction to Ginigera, which is about half way between Gangavati and Koppal. The actual mileage of the road from Raichur to Koppal *via* Manvi, Sindhanur, Gangavati and Ginigera is 118.4 miles.

Raichur—Lingsugur Road: The next important highway in the district is the Raichur—Lingsugur road, which has a length of 59 miles, out of which a length of six furlongs is of cement-concrete and 58 miles and 2 furlongs is of black-topped surface. It is a all-weather road, with bridges and culverts wherever necessary. Lingsugur, which is a taluk head-quarters, is directly to the west of Raichur town and is served by two routes, one branching off near Kurkunda to Yerdona *via* Hutti and then running south to Lingsugur. The other branch from Kurkunda to Lingsugur goes *via* Kavital and Pamankallur. This important route runs across Raichur taluk and enters Manvi taluk at its northern strip and then enters Lingsugur taluk. The road is heavily used by the Hutti gold-mining industry. Important places like Askihal, Kalmala, Hatnoor, Jakkaldinni, Sirvar, Navalkal, Mallat, Kavital, Ameengadh, Pamankallur, Yesrur and Sarjapur are touched by this road.

Hyderabad—Bangalore Road: This State Highway from Hyderabad to Bangalore passes through Raichur district for a length of about 35 miles, out of which a length of 23 miles is black-topped and the remaining length is of waterbound macadam surface. The traffic on this road has been always heavy. The distance between Hyderabad and Raichur is 125 miles. Buses, run by the Andhra Pradesh Transport Department, come daily to Raichur as also heavy-laden lorries. Indeed, the shortest route between Hyderabad (as also Raichur) and Bangalore is on this

road *via* Adoni and Anantapur in Andhra Pradesh. But there is no direct road route from Hyderabad to Bangalore, because the Tungabhadra has not yet been bridged near Gillesugur. Still, the road is called the Hyderabad—Bangalore road having regard to future potentialities. At present, Raichur town is at a distance of 307 miles from Bangalore, but this route would reduce it by 59 miles to 248 miles. The distance between Gulbarga, so also Bidar and Bangalore, would also be reduced considerably. The foundation-stone for the bridge has been already laid. (*See* also under Bridges).

Lingsugur—Gangavati Road : This road has a total length of 57 miles and 2 furlongs, covering Lingsugur, Kushtagi and Gangavati taluks, out of which only a length of 10 miles is State Highway and the rest is Major District Road. The road takes a southern direction from Lingsugur, cuts away from the Maski road and traverses *via* Mudgal, Tawargera, Hulihaidar, Kanakgiri and then on to Gangavati. The road is partly of State Highway standard and partly of Major District Road standard, and is entirely black-topped. This is also an all-weather road.

The two bridges one on the Krishna near Tintini and the other on the Tungabhadra near Kampli, have provided a new diversion to the importance of this road. Now the people from Gulbarga can reach Bellary on the same day. This road may also become vital for a through communication between Gulbarga and Bangalore without touching Raichur town.

Koppal—Yelburga Road : This road, which has a length of 25 miles and 2 furlongs, is yet another important roadway linking two taluks, namely, Koppal and Yelburga, in the south-western portion of the district. Of the total length, seven miles and six furlongs are of State Highway category and seventeen miles and four furlongs are of Major District Road category. The entire length is black-topped. This road passes *via* Kuknur and Kallur. From Yelburga, there are communications to Ron in Dharwar district. This road is also important because, for a little distance, it runs parallel to the Hospet-Gadag metre-gauge railway line and cuts the line at one point. At the level-crossing, the road takes a north-westerly direction to Kuknur and then on, it takes a straight northerly direction to reach Yelburga.

Sindhanur—Tawargera Road : This road has a length of 25 miles and is fully metalled ; it is another important State Highway running from Sindhanur, straight west, *via* Turvihal, to Tawargera. Most of the road is in Sindhanur taluk and only a length of 2¼ miles is in Kushtagi taluk. This road runs parallel to the Kanakanala stream at a distance of 2 to 4 miles.

Tawargera—Kushtagi Road: The Tawargera-Kushtagi road, which has a length of 15 miles, is black-topped. It is a continuation of Sindhanur-Tawargera road. The road traverses from Sindhanur straight to Kushtagi, a taluk headquarters.

Khanapur—Lingsugur Road: This road starts from Khanapur, an important village in Yadgir taluk in Gulbarga district, and runs south-west to Lingsugur, in Raichur district. A portion of this road, from this side of the Tintini bridge to Lingsugur, is in Raichur district. This is a portion of Bangalore-Gulbarga route. The total length in Raichur district is twenty miles and three furlongs, of which seventeen miles and four furlongs are black-topped and two miles and seven furlongs are of water-bound macadam surface.

Lingsugur—Sindhanur Road: Yet another important road in the district is the Lingsugur-Sindhanur road. which is of a length of 30 miles. Starting at Lingsugur, which is a taluk headquarters, this State Highway runs south-west to Sindhanur *via* Maski. The road is entirely black-topped and is a part of Bangalore-Gulbarga road.

Sindhanur—Dhadesugur Road: This road runs to a length of 12 miles and 7 furlongs which is black-topped; it cuts off at the fourth mile on the Sindhanur-Gangavati road and takes an easterly direction running parallel to Kanakanala stream. This road is of State Highway category. Dhadesugur is on the left bank of the Tungabhadra. The bridge at Dhadesugur connects the Sindhanur-Dhadesugur road with Bellary.

Bhanapur—Bannikoppa Road: This State Highway covers a length of nine miles and six furlongs in the district, out of which four miles and six furlongs are black-topped and five miles are of water-bound macadam surface. This is a part of the State Highway, leading from Koppal to Gadag, an important commercial centre of the State in Dharwar district.

Mudgal—Belihal Road: This State Highway connects Raichur district with Bijapur district. This road has a length of ten miles and three furlongs, out of which a length of two miles is black-topped and the rest is of water-bound macadam surface.

Major District Roads

Ginigera—Keslapur Road: (Length—37 miles and 2 furlongs).—This road has two separate sections, one that branches off at Ginigera to terminate at Gondbal and the other that branches off at 5/0 of Koppal-Yelburga road leading to Keslapur to join Mundargi, a commercial centre in Dharwar district. Ginigera, Allanagar, Kunikera and Gondbal on one section and Wadgerahalli, Katarki, Gudlanur, Batergi, Halvagal and Keslapur on the

other section, are some of the important places that are served by this road.

Kushtagi—Hanamsagar Road: (Length—13 miles and 3 furlongs).—This road connects Hanamsagar with Kushtagi, a taluk headquarters. From Hanamsagar, there are roads leading to important places in Bijapur and Dharwar districts, important among them being Ilkal in Bijapur district and Gajendragad in Dharwar district.

Raichur—Deodurg Road: (Length—26 miles).—This road connects two taluk headquarters, namely, Raichur and Deodurg. This is an important road and forms a part of the Gulbarga-Raichur road. From Raichur, it takes a straight westerly course and, near Kalmala village, it takes off from Raichur-Lingsugur road at mile No. 10/5, taking a north-westerly direction to Deodurg. This road passes through Sultanpur, Gabbur, Kakergal, Masarkal and Chickhunkuni villages. The entire length of this road is black-topped.

Deodurg—Tintini Road: (Length—21 miles and 4 furlongs).—This is also an important road leading from Deodurg to Tintini, where the bridge across the Krishna links Raichur district with Gulbarga district. This road touches Jambaldinni, Jalhalli, Kasigud and Bunkaldoddi villages. Out of a total length of 21 miles and 4 furlongs, a length of 7 miles is black-topped and the rest is of water-bound macadam surface.

Kavital—Maski Road: (Length—13 miles and 6 furlongs).—This is a feeder road running south-west from Kavital to Maski. The road runs in the Tungabhadra ayacut area and is quite useful for the farmers. It has a water-bound macadam surface.

Gabbur—Sirvar Road: (Length—13 miles and 4 furlongs).—This road joins Sirvar with Gabbur, which is on the Raichur-Deodurg road. It connects three villages, namely, Majeedpur, Ganekal and Nagadinni.

Yelburga—Sankanur Road: (Length—9 miles and 6 furlongs).—This is also an important road connecting Yelburga with Sankanur. This road leading to Naregal, an important commercial centre in Dharwar district, links Raichur district with Dharwar district. This road is of water-bound macadam surface.

Deodurg—Shahapur Road: (Length—5 miles).—This road provides a link between Gulbarga and Raichur districts. The road starts from Deodurg in Raichur district and leads to Shahapur in Gulbarga district. After the completion of the major bridge across the Krishna near Huvinhedgi village, the distance between Gulbarga and Raichur cities would be reduced

to 103 miles from 137 miles on the existing route *via* Deodurg, Jalhalli, etc., crossing the Krishna at Tintini.

Bayalmarchaid—Rajolibanda Road: (Length—111 miles and 5 furlongs).—This road is in the ayacut area, and so, is quite useful to the farmers of nearby villages. It has a water-bound macadam surface.

Yergirhalli—Alanapur Road: (Length—6 miles and 3 furlongs).—This road connects Raichur with Andhra Pradesh. It is a part of Raichur-Kurnool road and is black-topped.

Gangavati—Kampli Road: (Length—5 miles and 2 furlongs).—This road links Gangavati with Kampli, an important place in Bellary district. Out of five miles and two furlongs, a length of one mile and one furlong is black-topped and the rest is of water-bound macadam surface.

Amareshwar Temple Road: (Length—2 miles and 2 furlongs).—This road branches off from Khanapur-Lingsugur road to Amareshwar, where the famous Amareshwar temple is located. The entire road-length is black-topped.

Other District Roads

The following are some of the important Other District Roads in the district:—

Navalkal—Hutti Road: (Length—23 miles).—This is an important road connecting Raichur with the famous gold town of Hutti. This road is being fully used by the expanding gold-mining industry at Hutti. Out of 23 miles, a length of one mile is black-topped and the rest is of water-bound macadam surface.

Raichur—Budadipad Road: (Length—17 miles and 2 furlongs).—This road leads to a pilgrimage centre, the *samadhi* of Shri Channabasaveshvara Swamy, at Naradagadde island in the Krishna river. Out of the total length of 17 miles and two furlongs, seven miles are of water-bound macadam surface and ten miles and two furlongs are of 'other kinds of surface'.

Gangavati—Anegundi—Munirabad Road: (Length—20 miles and 6 furlongs).—This is an important road connecting three important centres in the district, namely, Gangavati, a taluk headquarters, Anegundi, a historical place, and Munirabad, an industrial centre. Out of the total length of twenty miles and 6 furlongs, a length of nine miles and two furlongs is black-topped and the rest is of water-bound macadam surface.

Kushtagi—Gajendragad Road: (Length—10 miles and 2 furlongs).—This road connects Raichur district with Gajendragad in Dharwar district. Out of the total length of ten miles

and two furlongs, a length of 3 miles is black-topped and the rest is of water-bound macadam surface.

Sirvar—Manvi Road: (Length—11 miles and 4 furlongs)—This road links two State Highways, namely, the Raichur-Lingsugur road and the Raichur-Ginigera road. The entire length of the road is of water-bound macadam surface.

Major bridges

With two big rivers flowing on either side of the district and numerous streams and nalas interspersing the doab region, no amount of road programme would serve the purpose without paying equal attention to the construction of bridges across these rivers and streams. Though railway bridges were constructed across the Tungabhadra and the Krishna at required points at the time of laying railway lines, construction of road bridges had not been taken up till recently. The rivers remained unbridged for a very long time. A major road bridge across the Krishna connecting Hyderabad with Raichur was inaugurated in 1352 Fasli, *i.e.*, 1943 (construction work was started in 1347 Fasli, *i.e.*, 1938) by the Government of the erstwhile Hyderabad State in commemoration of a tour of Prince Nawab Jawad Jah. It was named as Judi Bridge. The bridge has a length of 2,488 feet and 35 spans of 60 feet each. The width of the bridge is 18 feet. The cost of the bridge was about Rs. 13,97,000.

The year 1959 was a memorable year for the people of Raichur district. The work on three important bridges—one across the Krishna and two across the Tungabhadra—at very vulnerable points near Kampli, near Sirguppa and at Tintini were started in that year.

Bridge near Dhadesugur and Sirguppa: There was no direct major road communication facility between the districts of Raichur, Gulbarga and Bidar on the one hand and with the old Mysore area of the new Mysore State on the other, till a bridge across the Tungabhadra near Dhadesugur and Sirguppa was built. Till then, only a low-level bridge built near the Tungabhadra dam at Munirabad connected Raichur district with Bellary district. In order to avoid a detour and have direct communication between these districts of erstwhile Hyderabad State and Bangalore, it was decided to take up the construction of this major bridge across the Tungabhadra. The work on the bridge commenced in November 1959 and it was completed during the year 1961-62. Actually, there are two bridges, one on the left, across the main river and the other on the right, across the branch river with Desanur island in between.

This bridge joins the Sindhanur—Dhadesugur road in Raichur district and Dhadesugur—Sirguppa—Bellary road in Bellary district The road on this bridge joins the Poona-Bangalore

National Highway at Hiriyur, through Sirguppa—Bellary—Challakere road. When compared with the circuitous route *via* Munirabad, this route is a much shorter one, the distance reduced being about 58 miles. The width of the road over the bridge is 24 feet. The cost of construction of the bridge was about Rs. 22,47,000.

Bridge near Chikjantkal and Kampli: There was a long-standing demand for a bridge across the Tungabhadra near Kampli in Bellary district, with a view to connecting the important towns of Kampli (Bellary district) and Gangavati (Raichur district). There was not even a fair weather crossing near Kampli. The need was felt greater when the question of transporting sugarcane grown round about Gangavati and other places on the left bank to the sugar factory at Kampli arose. Hence, a decision was taken to construct a submersible bridge near Kampli. The work was started in June 1959. It was completed during 1961-62 and the total cost of the bridge was about Rs. 18,07,000. The bridge site is located near Chikjantkal on the left bank and Kampli on the right bank of the Tungabhadra river.

Bridge near Chincholi and Tintini: A bridge across the Krishna near Tintini was a must to connect directly Bidar and Gulbarga with Raichur and Bangalore by road. The existing road journey was unnecessarily long. The work was started in November 1959 and the bridge was constructed in Khanapur—Lingsugur road at a cost of about Rs. 25,87,000. The bridge near Sirguppa would not have been of great use to the people of the Raichur, Gulbarga and Bidar districts in particular, and of the State in general, without this bridge near Tintini.

Bridge near Gillesugur: The shortest route between Raichur and Bangalore can be *via* Adoni and Anantapur in Andhra Pradesh. But this route cannot be made use of for want of a bridge across the Tungabhadra near Gillesugur. At present the Raichur town is at a distance of 307 miles from Bangalore, *via* Tumkur, Sira, Hiriyur, Challakere and Bellary crossing the Tungabhadra over the Sirguppa bridge. But a bridge at Gillesugur would reduce the distance by 59 miles. Thereby Raichur town will also gain in importance. At present, it is not located on Bangalore—Gulbarga—Bidar (*via* Sirguppa) route. But the proposed bridge near Gillesugur would reduce considerably the distance between Bangalore and Gulbarga and Bidar by linking them up *via* Raichur. The trade between Mysore State and Andhra Pradesh would also get thereby a more impetus. Mantralayam, a famous pilgrimage centre in Andhra Pradesh, would also be connected with Raichur by road. According to some, the proposed bridge can be called the "Gateway of Raichur district." It may be remembered that there is already a bridge across the Krishna near Devarsugur on the Hyderabad—Bangalore road.

The foundation-stone for this bridge has already been laid. The estimated cost is about Rs. 44,75,000.

Bridge near Huvinhedgi: This is also a very important proposed bridge to be constructed across the river Krishna, near Huvinhedgi village. After the completion of this bridge, the distance between Gulbarga and Raichur would be reduced to 103 miles as against 197 miles at present, *via* Deodurg, Jalhalli, Tintini bridge, etc. This bridge is likely to be completed by the end of 1972 and the estimated cost of its construction is Rs. 29,86,000.

There were 24 major bridges in the district in 1960. The total number of such bridges rose to 42 by March 1968. The year-wise details of bridges in the district are as given below :—

Year (as on 31st March)	*Number of bridges with a linear waterway of*				*Total number of bridges*
	Above 1000′	*Above 500′ but less than 1000′*	*Above 300′ but less than 500′*	*Above 100′ but less than 300′*	
1960 ..	3	1	2	24	30
1965 ..	3	1	4	23	31
1966 ..	3	1	4	24	32
1967 ..	3	1	5	28	37
1968 ..	3	1	5	33	42

With 42 major bridges in the district, Raichur ranks second in the State, the first being South Kanara district with 67 major bridges. The total linear waterway of these 42 bridges is 13,764 feet.

Expenditure on bridges

The Public Works Department of the State Government has spent nearly a crore of rupees on bridges in Raichur district during a period of seven years from 1961-62 to 1967-68. The details of this expenditure are as given below :—

Year	*Expenditure on*		*Total*
	Original works	*Repair works*	
1	2	3	4
1961-62	25.14	..	25.14
1962-63	10.59	0.57	11.16
1963-64	5.94	0.26	6.20
1964-65	6.87	0.44	7 31

1		2	3	4
1965–66	.. ..	11.55	0.13	11.68
1966–67	.. ..	29.52	0.13	29.65
1967–68	.. ..	6.30	0.31	6.61
	Total ..	95.91	1.84	97.75

Vehicles and conveyances

Conditions of modern life necessitate quick transport of passengers and goods from place to place. The cheapest modes of conveyance are, of course, the beasts of burden like donkeys and ponies. In the rural areas, where cotton is grown, donkeys and ponies are useful for transporting cotton to centres of trade. They carry on their backs heavy quantities of goods like cotton and groundnut and trudge their weary way to the destinations. According to the livestock population census conducted in 1956, there were 3,669 donkeys and 3,435 horses and ponies in the district and in 1966, there were 4,849 horses and ponies and 1,752 donkeys. Horses and ponies are used for the tongas. Bullock-carts have been playing an important part in the agricultural economy of the district.

The usual means of ready and cheap conveyance is the bullock-cart which is found in large numbers in the rural areas. The carts have two wheels made of wood and wooden spokes with an axle which revolves on a kingpin lubricated by oil. Two bullocks are tied in front and the goods are heaped on a platform which is about 10 feet by 3 feet. Hand-carts are also being used for short distances in trade centres. These are small two-wheeled carriages drawn by two people in the front and sometimes another man pushing from behind. Such carts are used as auxiliary transport vehicles.

The bullock carts with or without tops are generally seen all over the district plodding their way from place to place. Actually, their number has gone up recently, though we find a dwindling trend in most of the districts of the State. The number of bullock-carts per km. of village roads was 74, with 30,136 bullock-carts in 1961. It had gone up to 80 with 59,182 bullock-carts in 1967. Long distances are covered with a speed of 3 to 5 miles an hour. These loaded carts leave their starting places often in the nights and reach their destinations in the mornings. There is no licensing or registration system for these bullock-carts nor any taxation. Tolls are levied by the municipalities and these are not heavy. Under the local municipal revenue laws, a small amount is levied for incoming cart traffic at the *chowki*.

The other means of conveyance in the district are the usual push bicycles, cycle rickshaws, horse-drawn tongas, private cars,

jeeps, lorries and trucks. Bicycles are an easy and cheap mode of conveyance and are found all over the district. The bicycle owners have to get licences from the municipalities. There are many cycle rickshaws in some of the important towns of Raichur district, particularly in Raichur town. Usually, two persons can be carried and the driver seats himself on a seat and pedals the vehicle. The cycle rickshaws are owned by financiers and are given on contract to those who ply them for a fixed daily rent. The driver has to find customers and after paying the contract hire, has to use the balance for himself. There are about 500 cycle rickshaws in Raichur town. There are no auto-rickshaws anywhere in the district.

Single horse-drawn tongas, with a fixed top or in some cases collapsible top, are another popular conveyance. With the emergence of cycle rickshaws, the tongas have decreased in number. Altogether, four persons, including the driver, can sit inside the tonga. Tongas in Raichur town are hired for distances even upto Yermaras, which is about five miles away. These vehicles are found especially at the Raichur railway station; those who have heavy luggage usually take tongas and those with light luggage hire cycle rickshaws. Apart from these conveyances, Raichur has no town bus service nor are taxis available.

Public Transport

Though the former Hyderabad State was the pioneer in the establishment of State-operated road transport services, Raichur could not have the benefit of this policy early, mainly due to the unfavourable attitude of the Nizam's State Railway (*see* under Road Communication). The railway, which managed also the road transport service, made the condition of the road a chief determinant for introduction of services. Though this policy had the effect of prompting the State to improve the condition of the roads, it slowed down the pace of expansion of the services of the Road Transport Department. "One of the areas in which delay in road improvements and in bridging rivers checked expansion for a long time, is the Raichur area."*

The Road Transport Department was separated from the Railways in 1952. After the reorganisation of States in 1956, the road transport services, operated under the four depots at Humnabad, Yadgir, Raichur and Lingsugur, were taken over by the Mysore Government Road Transport Department in 1956. Considerable progress has been achieved in providing road transport services in this region since the reorganisation of States. Formerly, the headquarters of the division was at Raichur. It was shifted to Gulbarga in 1960 for administrative and operational convenience. Now, Raichur district is a part of the Gulbarga

*Nationalised Road Services in Hyderabad by Dr. V. V. Ramanandhan.

Division of the Mysore State Road Transport Corporation. There are two depots in Raichur district, one at Raichur and the other at Lingsugur, under the control of Depot Managers, who are responsible to the Divisional Controller, Gulbarga Division. There is a sub-divisional workshop at Raichur, and two depot workshops at Raichur and Lingsugur, respectively.

There are about twelve important routes served by the Mysore State Road Transport Corporation. They are: (1) Raichur—Yelburga, (2) Raichur—Deodurg, (3) Raichur—Jalhalli, (4) Raichur—Gurgunta, (5) Raichur—Sirguppa, (6) Raichur—Matmari, (7) Raichur—Koppal. (8) Raichur—Gangavati, (9) Raichur—Sindhanur, (10) Sindhanur—Kushtagi, (11) Raichur—Sindhanur and (12) Raichur—Kushtagi. The total number of routes operated by the Corporation in the district, as at the end of March 1969, was 61, the total route-kilometres operated being 5,767. The service-kilometres covered daily are 13,457 and the number of passengers carried about 16,144. The year-wise operational data are as given below:—

Sl. No.	*Operational data*	*As on 31st March*				
		1965	1966	1967	1968	1969
1.	Number of vehicles ..	56	64	66	71	71
2.	Number of routes ..	..	..	52	59	61
3.	Revenue per seat km. (in paise).	2.4	2.5	2.3	2.3	2.4
4.	Revenue per kilometre (in paise).	125.5	130.4	125.5	124.0	135.4
5.	Average daily revenue (in rupees.)	14,581	17,879	19,109	20,001	20,211
6.	Average number of passengers carried per day.	..	..	15,030	15,554	16,144

The Corporation has constructed permanent bus stations at Raichur, Lingsugur and Gangavati.

Though it is seen from the foregoing figures that the Mysore State Road Transport Corporation has been extending its services in the district, the services provided by the Corporation are still inadequate, if we take into consideration the requirements of the district. Private operators have put their buses on some of the important routes, but they are meeting the requirements only partly. Moreover, on some of the routes, the services offered by them are not upto the mark.

As regards the motor cars, the number is not large. There are only 283 motor cars in the district; but there is a good number of jeeps, with a total of 376. There are 513 goods vehicles. The number of private buses registered in the district is about 120.

The figures of various types of vehicles registered in Raichur district during the 11 years from 1959 to 1969 are as given below:—

Year		Motor cars	Goods vehicles	Stage carriages	Omni-buses	Jeeps	Motor cycles	Others
1959	..	29	266	65	8	20	10	3
1960	..	41	221	79	9	38	26	9
1961	..	48	288	90	8	46	35	9
1962	..	56	344	113	8	62	43	9
1963	..	201	424	147	8	176	132	119
1964	..	187	351	170	10	188	166	153
1965	..	176	398	195	13	183	158	127
1966	..	220	376	189	13	217	223	223
1967	..	234	366	154	14	244	290	343
1968	..	266	480	186	17	257	330	517
1969	..	283	513	182	21	376	285	749

It is clear from the foregoing figures that there has been a considerable rise in the number of vehicles registered in the district. The total has gone up from about 400 in 1959 to about 2,410 in 1969, thereby registering a six-fold rise. The rise has been remarkable since the year 1962.

With the rise in traffic, there has been a rise in the number of accidents on the roads of Raichur district; while the number of accidents was 58 in 1966, it was 95 in 1968. The details of road accidents for three years from 1966 to 1968 are as given below:—

Year		No. of accidents	No. of persons killed	No. of persons injured	No. of persons injured and killed
1966	..	58	16	66	82
1967	..	73	25	39	64
1968	..	95	18	87	105
Total	..	226	59	192	251

All motor vehicles in the district come under the motor vehicles regulation. All vehicles driven by internal combustion like petrol and diesel have to get registered according to the vehicle's horse power, seating capacity, laden weight, etc., and quarterly and half-yearly and yearly taxes have to be paid to the Government. Lorries, which carry merchandise, are becoming quite popular as a quick means of transport. The Regional Transport Inspectors of each region have to inspect the vehicles and determine how far they conform to the Motor Vehicles Regulation. There are differences in taxation for public and private carriers. Private carriers are those lorries owned by people for a particular private use. Public carriers are lorries meant for hire; they are plied for hire whenever customers need the service. All private cars have to be registered and taxes paid. Motor vehicles include motor cycles, scooters, trucks and jeeps.

Railways

The Raichur district is served by two railway lines with a total length of only about 70 miles, one a metre gauge line on the extreme west of the district passing near the Tungabhadra dam and the other a broad gauge line passing from north to south almost straight *via* Raichur town. Before the reorganisation of States, in the old district of Raichur, there were three lines including the line passing through the Gadwal *Samsthan* and Alampur taluk.

Compared to its area of about 5,436 square miles, the district is very poorly served by railways. Of the 70 miles of rail track, about 35 miles of the broad gauge line, which passes through the district from the bank of the Tungabhadra river in the south to the bank of the Krishna river in the north, may be described as the 'life-line' of the district. This line of communication begins on the banks of the Tungabhadra, about 17 miles south of Raichur, and traverses the two most important districts of the Hyderabad-Karnatak area, namely Raichur and Gulbarga, and enters the Maharashtra State near Akalkot Road on the Hotgi—Sholapur Section of the broad gauge. This broad gauge line is the Bombay-Madras line, a distance of 794 miles, touching important centres like Poona, Dhond, Kurduwadi, Sholapur, Hotgi, Wadi, Raichur, Guntakal, Gooty, Cuddapah, Renigunta and Arkonam.

Railway lines in the district have passed from time to time from one administration to another during the period of nearly a century. The old Madras Railway, the Madras and Southern Mahratta Railway Co., the Great Indian Peninsular Railway, the Nizam's Guaranteed State Railway, the Nizam's Railway (N.S.), and later on the Southern and Central Railway zones which finally have been merged in the new South-Central Railway, have successively managed the lines. The Southern Railway limits extend from the Tungabhadra bridge to Raichur

and the South-Central Railway limits extend from Raichur junction to the Krishna station in the north, from Munirabad to Bannikoppa on the west and from the Tungabhadra bridge to 55 km. towards Hubli station.

The broad gauge portion of the track has a south to north direction and the metre gauge portion has roughly an east to west direction. The metre gauge portion in the district is also a vital link, famous as the life-line across the peninsula between two ports, Machilipatnam on the Bay of Bengal and Goa on the Arabian Sea. This metre gauge line, which starts from Machilipatnam, takes an east-west course across Vijayawada, Guntur, Dronachalam, Guntakal, Bellary, Hospet, Gadag, Hubli, Dharwar, Londa and Marmagoa.

Broad gauge

The broad gauge portion of the railway track in the district was laid between 1861-1871. At that time, it was felt that a direct communication was necessary between the two Presidencies of Madras and Bombay and the culmination of that endeavour was the Arkonam—Raichur section. The former Madras Railway, of which the Madras and Southern Mahratta Railway was the successor, undertook the construction of the rail-road between Arkonam, which is on the 43rd mile of the Madras—Raichur section, and Raichur which is at the 351st mile. The line was completed and opened for traffic piecemeal between the years 1861—1872. Till June 1908, the Madras Railway administered the track, both in the spheres of traffic and freight, till the railroad was amalgamated with the Madras and Southern Mahratta Railway Co., Ltd., a joint-stock enterprise floated in England. In pursuance of the policy of State ownership of the Indian Railway system, the Government of India took over the administration from the Madras and Southern Mahratta Railway Co., on 1st April 1944. This railway system was later merged in a zone called the Southern Railway Zone.

The broad gauge portion of the Madras—Raichur section begins in the district at mile 333-15/16 on a point in the Tungabhadra bridge, a few furlongs away from the Mantralayam Road station, and ends at Raichur junction which is on 350/16th mile. From Raichur, the South-Central Railway system commences. Between Raichur and the southern district boundary, there are only two stations called Matmari and Marichethal. Beyond Matmari, the river Tungabhadra is crossed.

Metre gauge

The metre gauge track between Hubli and Hospet was laid in 1885 and since then, it has served as a major link between the two coasts of the peninsula. This track in Raichur district commences at a point between Hospet and Munirabad stations and ends in between Sompur Road station and Halligudi station, which has a length of 55.3 kms (34.4 miles). The stations which are located in the district are Munirabad, Ginigera, Koppal,

Bhanapur, Bannikoppa and Sompur Road. The district boundary commences at 83.6 kilometres and ends at 139.0 kilometres on the section.

There are three major railway bridges in the district, two across the Tungabhadra and one across the Krishna. The Tungabhadra is crossed on the broad gauge near Mantralayam Road and the same river is crossed on the metre gauge near the boundary of the Bellary and Raichur districts. The Krishna river is crossed on the broad gauge near the boundary line between Raichur and Gulbarga districts. Munirabad, on account of the multi-purpose dam across the Tungabhadra and because of some new industries, has become an important station. Koppal, Ginigera, Bhanapur and Bannikoppa are also important as trade centres. All these are situated on the metre gauge link. On the broad gauge, Matmari is an important railway station, as the place is the centre of jowar trade. Raichur is a junction station as it is situated at the point where the Southern Railway system ends and the South-Central Railway system begins. Ever since the Madras—Bombay broad gauge line was laid, Raichur junction has been an important halting place for handing over the train from one administration to another. In the former days, the train of Great Indian Peninsular Railway ran from Bombay to Raichur and was handed over to the Madras and Southern Mahratta Railway. Now, the South-Central Railway hands over the train there to the Southern Railway.

Raichur Junction

The railway station at Raichur is situated to the west of the fort and is constructed on an open level place. When coming from the north, the station is visible even from Yermaras, a railway station 4½ miles away from Raichur on the South-Central Railway system. Passengers travelling by the Madras—Bombay express from south to north can see the search lights of the station even from a distance of three to four miles away. The station building is an old structure raised at the time when the broad gauge track was laid in 1870. The station has now three platforms, including a main one, which is used for long-distance trains. The other two are meant for locals. The access to the second and the third platforms is by way of an overhead foot-bridge constructed to the north of the station. The station is well served with waiting rooms, vegetarian and non-vegetarian refreshment stalls, dining halls and security office. The station building, which faces west, has a courtyard to the east where cars, tongas and cycle rickshaws stand for the use of passengers. Access to the railway station is from the Hyderabad—Yergera main road. The station is well lit with mercury vapour lamps and fluorescent tubes. There are two loco sheds—one on the south and the other on the north of the station. Even though passenger trains come at fixed hours, the station is busy throughout the 24 hours on account of the long distance goods traffic on

the main line. Quarters have been provided both to the permanent and running staff.

The goods shed, situated to the south of the station at Raichur, is a centre of great commercial activity as most of the ginned and pressed cotton is sent to Sholapur and Bombay. Groundnut-oil is also exported outside. As the broad gauge line is the only railway communication going towards the north and also the east to Hyderabad *via* Wadi junction, much of the merchandise passes through the Raichur railway station. The passenger traffic, both incoming and outgoing, is also considerable. The passengers from Raichur have to pass through Wadi junction to reach places in the former Hyderabad State.

Potentialities for railway development are, indeed, very great in the district and the plain nature of the terrain makes it easy for rail tracks to be laid. The people of the district have been agitating for a metre gauge line between Raichur—Sindhanur—Kushtagi and then on to Badami on the Gadag—Sholapur section A metre gauge line between Raichur and Koppal is also a necessity.

Air-strip at Yermaras

There is an air-strip at Yermaras, which is situated at a distance of about five miles from Raichur town, towards the north. It was constructed in the year 1942 and is only a murrammy air-strip, and so, is meant for only light aircrafts. It can be used only during fair weather. Though this is just a fair weather air-strip, the people of Raichur are proud of it since they say that it is this air-stip which once saved the life of the late Pandit Jawaharlal Nehru, the then Prime Minister of India, in 1957, when the aeroplane in which he was travelling force-landed at Yermaras due to some trouble in the engine.

In all, an amount of Rs. 11 01,260 was spent on this air-strip.

Travel and tourist facilities

Though the district has several historically important monuments and other tourist attractions, travel and tourist facilities have not developed to the desired extent. There is, indeed, great scope for the development of tourism in the district. Maski, the Raichur fort, the temples at Itgi, Kanakgiri, etc., the pilgrim centres along the Krishna river, the dam across the Tungabhadra, the Hutti Gold Mines, etc., are some of the places of tourist interest in the district (*see* Chapter XIX). The Mysore Government have ambitious plans to provide hospitality homes, rest houses and other amenities to tourists. With the implementation of the plans, Raichur will have its share of tourist development. Better roads, good boarding and lodging facilities and other amenities, authorised guides, attractive tourist information literature, etc., go a long way in contributing to the development of tourism in the district.

Raichur district is fairly well served with inspection and travellers' bungalows, a list of which is given in the general Appendices. All these bungalows are maintained by the Public Works Department. There are two such bungalows in the district headquarters and one each at the other taluk headquarters and at some other places. Almost all these bungalows are fairly well-furnished and have electric lights and fans. They are located in shady areas with wide compounds, away from the bustle of traffic. Water is made available through specially constructed tanks. Chowkidars and cooks are appointed to look after the comforts of travellers. Much information is not available about the old-time rest houses and *dharmashalas*. There are some lodging places called *sarais*, which have been there from the earlier times, but most of which are now in a dilapidated condition. In all Hindu pilgrim centres, the temple authorities maintain *dharmashalas* where pilgrims can reside during fairs and festivals. In Raichur and other places, the Muslims have their *sarais* or *Musafirkhanas* very near important mosques. Food can be had from nearby eating houses.

Some of the travellers' bungalows are newly constructed. The inspection bungalows at Raichur town, Yermaras and at the dam site at Munirabad are *de-luxe* bungalows with all modern amenities. Though these bungalows are primarily meant for touring inspection officers, they are also hired out to the public when not occupied by Government officers. The bungalow at Yermaras is built on the top of a ridge and commands an expansive view of the rolling plains of the locality. The bungalows at Munirabad near the Tungabhadra dam command a fine view of the water-spread.

The travellers' bungalows located at taluk headquarters have generally two suites, a separate kitchen, garage and yard with a small garden and a well. Water is pumped and stored in overhead tanks. Modern sanitary conveniences are provided in most of the bungalows. Separate servants' quarters and separate latrines are also provided.

Hotels and Restaurants

The hotel industry has not grown in the district in relation to its progressive development in other spheres. The restaurants in the towns conform to Municipal bye-laws; they are well-frequented by customers both in the mornings and evenings. A standard menu is provided with *Idlies, Dosais, Chapathies, Karabath* and various sweets. The Udipi hotels have a common menu and these are not far different from that of other restaurants in other parts of the State. People in Raichur district, who frequent these hotels, have adjusted themselves to those preparations. A few hotels have refrigerators which provide cool drinks, ice-cream and fruit salads.

Eating houses at Raichur serve meals similar to those served in hotels in other cities and big towns of the State. The charge for a meal is somewhere between one to one-and-half rupees. As the people relish jowar or wheat bread, along with rice, the menu includes this item also. The other preparations do not vary from the common South Indian pattern; *pooris* are also served in some of the hotels. In the mofussil, the boarding houses provide varied menu according to the likes of the customers. The food supplied in these eating houses corresponds more to the North-Karnatak pattern with *bhakri*, vegetables, rice, curry, etc. The restaurants and hotels in the interior cannot be classed as standard hotels. They are housed in ill-ventilated, dark and dusty rooms. Tables are not provided in these hotels.

Lodging facilities in hotels are pitifully poor. In the whole of Raichur town, there is not yet one lodging and boarding house that can be said to conform to a good standard. Usually, a big hall on the upstairs of a rented building is converted into several partitions and each partition is provided with a bed. There are no attached bathrooms or toilets. The customers have to use a common bathroom. Hot water facility is provided on payment of a prescribed charge.

On the whole, the hotel industry has not seen any appreciable development. The development of tourism, if it is pursued vigorously and efficiently, will give a fillip to the hotel industry. The present day condition of the hotels in the district leaves much to be desired.

Postal facilities

Formerly, there were two postal systems in Raichur district as in other parts of the erstwhile Hyderabad State, one under the British administration and later under the Indian Union administration and the other under the State Government administration, until they were integrated in 1950. It is interesting to note the position in respect of post offices in the district about 80 years ago. According to the Settlement Report of Raichur taluk (1889), "only at Raichore itself there is a British post office, as well as a post office of His Highness' Government, of which the former is located at the Railway station and the latter in city.

"Further, there is nowhere a post office or a letter-box stationed throughout the taluka; but yet a rural messenger visits each and every village weekly to deliver the mofussil communications thereof and at the same time to take charge of any that may have to be posted." The Settlement Report of Gangavati taluk (1885) recorded: "There are two post offices, one at Gangavati, and the other at Kanakgherri. There is a British post office also at Kumpli in the Bellary district, about four miles distant from Gangavati." Later, postal facilities were extended to other important places.

In the entire district of Raichur, there were two British Post Offices, one at Raichur and the other at Lingsugur. The post offices run by the Nizam's Government were: the Raichur Head Post Office and sub-post offices at Lingsugur, Manvi, Gangavati, Kushtagi, Sindhanur, Gurgunta, Jalhalli, Balganur, Koppal, Deodurg, Sirvar, Kavital, Hutti and Mudgal. There were also three town sub-post offices at Mukkarram-gunj, Naya-bazaar and Station Road Post Office at Raichur. With the passage of time, branch post offices were opened to serve some important villages. All these post offices were under the Superintendent of Post Offices, Gulbarga. The Inspector of Post Offices, Raichur, was the Inspecting Officer. The Head Post Office was the cash office for all State post offices in the district. It obtained the required amount from the State Bank of Hyderabad and remitted its surplus funds to the Bank. The treasuries at the taluk level supplied funds to the sub-post offices and accepted their surplus funds.

Mails for the British Offices were conveyed mainly through Railway Mail Service. Between Raichur and Lingsugur, mails were conveyed by a private motor service engaged on a contract basis. Money orders, value payable articles and insured articles, received from places under the British Indian jurisdiction, were delivered by the Raichur Combined Sub-Post Office (British Post Office) by sending intimation through the State Post Offices. The payee or the addressee had to come to the Raichur Combined Sub-Post Office to receive the money orders or the articles as the case may be. Money orders accepted at a State Post Office for delivering at a post office under the British administration, were charged a higher rate of commission, as a portion of the commission had to be paid to the British Post Offices. Similarly, letters emanating from the State Post Offices deliverable by the British Indian Post Offices had to be paid for, for their respective services.

The post offices under the State Government used the Nizam's State Railway and private buses for the conveyance of mails between the sub-post offices. The mails for and from branch post offices were conveyed through the runners. The village postmen delivered both ordinary and registered letters, and also paid money orders at the village level. They also used to receive money orders, registered and ordinary letters at the village level for onward transmission. They also carried to the villages postage stamps for sale.

After integration of the two systems with effect from the 1st April 1950, the Raichur district came under the administrative jurisdiction of the Director of Posts and Telegraphs, Hyderabad, and it was attached to the Gulbarga Postal Division. After reorganisation of States, this Division was included in the Mysore State. The Raichur district was made later a separate

postal division, with its headquarters at Raichur, comprising three postal sub-divisions, *viz.*, Raichur Sub-Division, Koppal Sub-Division and Sindhanur Sub-Division, each under the administrative control of an Inspector of Post Offices.

There are altogether 401 post offices in the district (1969), out of which one is a Head Post Office, four Lower Selection Grade Sub-Post Offices, seven First Class Offices, 12 Second Class Offices, 21 Third Class Offices and 357 Branch Post Offices. After the formation of the new division, from 1st May 1968 till March 1969, one sub-office and ten branch offices were opened in the district. As regards the delivery frequency, daily service is provided to about 1,325 villages, tri-weekly service to 17 villages and bi-weekly service to nine villages. According to the postal authorities of the Division, the year-wise numbers of letters, newspapers, packets and parcels delivered during the three years from 1966 to 1968 were as given below :—

Year		*Letters*	*Newspapers*	*Packets*	*Parcels*
1966	..	90,52,368	4,13,140	5,74,496	99,892
1967	..	45,81,044	4,03,468	5,37,310	72,488
1968	..	64,07,284	4,81,000	7,82,236	58,372

Money orders are accepted and issued at all post offices. The amount received in the district is smaller than the amount sent out from the district. The particulars relating to three years from 1966-67 to 1968-69 of money orders paid and booked in the district were as given below :—

Year			*Money orders paid*	*Money orders booked*
			Rs.	Rs.
1966–67	..	..	73,949	1,10,483
1967–68	..	..	84,748	1,57,594
1968–69	..	..	80,210	1,25,265

Savings Bank facilities are provided at the head office, the sub-offices and at 178 branch offices (*see* Chapter VI under

Banking). Postcards, envelops, inland letters, stamps, etc., are available for sale at all the post offices. Mails are carried by railways, buses and, in some cases, by postal runners. There are about 420 letter boxes in the district—73 in the urban areas and 347 in the rural areas. Taluk-wise numbers of letter-boxes are as given below:—

Raichur 87, Deodurg 31, Gangavati 35, Koppal 61, Kushtagi 44, Lingsugur 67, Manvi 30, Sindhanur 41 and Yelburga 24.

The 'Post-Box' facility is available at the Head Post Office at Raichur where there are 32 rented post-boxes.

During the Fourth Plan, it is proposed to open at least ten branch post offices in the district every year.

Telegraphs

Formerly, the Raichur Combined Sub-Post Office (known as British Post Office until 1947 and then as Indian Union Post Office) was the only telegraph office for the entire district. After the integration of the State post offices with those of the Indian Union in 1950, telegraph service was first provided at Raichur Head Post Office and telegraph traffic commenced from March 30, 1953. Raichur mainly transmitted its messages on morse to Sholapur local line and Sholapur-Bellary-6. There are other Combined Post and Telegraph Offices at Koppal, Gangavati, Munirabad, Hutti and Lingsugur. (Koppal and Munirabad work with Bellary on Gadag-Bellary circuit, Gangavati works with Bellary LL and Hutti and Lingsugur work with Adoni on Adoni-Raichur circuit).

Teleprinter

Teleprinter service between Raichur and Bangalore was introduced with effect from June 20, 1969. There is a proposal to have a teleprinter circuit between Raichur and Sholapur.

Telephones

There is an Automatic Telephone Exchange with a capacity of 400 lines at Raichur. There is a proposal to expand the same from 400 to 600. As on 31st December 1968, there were 386 working connections in the Exchange. Raichur has got the following direct trunk lines working into other exchanges:—

(1) Gulbarga (4 lines)
(2) Guntakal
(3) Adoni
(4) Narayanpet
(5) Yadgir
(6) Hyderabad
(7) Bangalore
(8) Hospet
(9) Bellary
(10) Gangavati
(11) Lingsugur
(12) Sindhanur
(13) Manvi
(14) Krishna

The particulars of telephone exchanges working in the district are as given below :—

(1) *Gangavati*.—There is a Manual Exchange of 200 lines capacity with 165 working connections and 25 on the waiting list. There is a proposal for expansion.

(2) *Koppal*.—There is an Automatic Exchange with a capacity of 100 lines with 76 connections. There are about 25 in the waiting list. It is proposed to increase the capacity to 200 lines.

(3) *Lingsugur*.—Lingsugur has a small Automatic Exchange of 50 lines with 26 working connections.

(4) *Manvi*.—There is a small Automatic Exchange of 25 lines with 18 working connections.

(5) *Munirabad*.—Munirabad has a small Automatic Exchange of 50 lines with 20 working connections.

(6) *Sindhanur*.—It has a small Automatic Exchange of 50 lines with 31 working connections.

(7) *Kuknur*.—There is a small Automatic Exchange of 25 lines with 14 working connections.

There are proposals to open telephone exchanges at Kushtagi and Karatgi. There are twelve long distance Public Call Offices in the district at Deodurg, Hutti, Karatgi. Kinhal, Kavital, Maski, Mudgal,. Turvihal, Yergera, Yelburga, Alawandi and Guddagere. There is a proposal to open six more such offices in the district in the near future.

Radio sets

Radios have become very popular in the district, especially the transistor sets in the rural areas. The number of radio sets licensed in the district stood at 7,591 in the year 1967 and it had gone up to 7,678 in 1968.

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS

THE foregoing chapters have dealt, in detail, with the main sectors of the economy of the district such as agriculture, industries, banking, finance, transport and communications, in which an appreciable percentage of the population is engaged.

Another important segment of the working population is to be accounted for in this chapter. These are engaged in other economic pursuits like public administration services, domestic services, and learned professions like law, medicine, engineering and fine arts and in certain other occupations which are attracting an increasing number of persons to the urban areas like tailoring, hair-cutting, running of hotels and restaurants, laundries, etc. These occupations provide employment to a considerable number of persons, who render useful services in different ways to different persons and produce goods or aid production of articles of daily consumption. The mechanisation of agriculture that has been taken up in the ayacut taluks of the district, the new industries that are coming up in private sector and the improvements effected in the field of transport and communications have opened out new avenues of employment in the district.

Out of the total population of the Raichur district, which was 11,00,895 as per 1961 census, 5,12,061 or less than a half were classified as workers, of whom a working population of as many as 3,92,508 were engaged in agriculture and the remaining 1,19,553 persons were pursuing other occupations. Among the latter, nearly 53,000 were found to be engaged in other avocations such as those stated in the above paragraph, which are grouped under miscellaneous occupations. Of them, nearly 18,600 persons lived in urban areas where the chances of getting employments are better.

The taluk-wise distribution of persons engaged in miscellaneous occupations, in 1961, was as follows :—

Sl. No.	Name of taluk			Number of persons
1.	Deodurg	..	..	5,951
2.	Gangavati	..	..	5,852
3.	Koppal	..	..	5,141
4.	Kushtagi	..	..	2,493
5.	Lingsugur	..	..	4,248
6.	Manvi	..	..	4,717
7.	Raichur	..	..	16,856
8.	Sindhanur	..	..	4,235
9.	Yelburga	..	..	3,304
		Total	..	52,797

The above figures indicate that Raichur taluk takes the lead by providing employment to the largest number of persons under this category.

Public Administration Service

An appreciable number of persons in the district have been engaged in the several branches of public administration. This includes persons working in the various offices under the Central and State Governments, those working on the establishments of the various local bodies and village officials. In 1961, the number of employees under the State Government, Central Government and local bodies was 7,657, 945 and 974 respectively. Obviously, there has been a gradual increase in the employment opportunities in this field. In order to study these changes and such other subjects of interest, the State Bureau of Economics and Statistics has been conducting a survey of Government employees since 1959. The details of the number of persons employed in the State Government offices in the district from 1961 to 1967 were as follows :—

Sl. No.	Year			Number of employees			
				Gazetted	Non-Gazetted	Class IV	All
1.	As on 31st March	1961	..	202	5,700	1,755	7,657
2.	Do	1962	..	207	5,892	1,943	8,042
3.	Do	1963	..	209	5,756	1,846	7,811
4.	Do	1964	..	216	5,896	1,844	7,956
5.	Do	1965	..	175	7,015	1,836	9,026
6.	Do	1967	..	212	7,198	1,537	8,947

In the above table, the figures for 1963 and 1964 show a decrease in the number of persons employed from those of 1962, and again the figures for 1967 show a decline over that of 1965; but actually it is not so. According to the Bureau of Economics and

Statistics, these are not complete figures, since several offices had not furnished the required particulars to the authorities conducting the census. It was stated that the non-response from various offices in the State in submitting the required data worked out to about 10 per cent in 1962, 16 per cent in 1963 and 18 per cent in 1965. It was also reported that the survey work for 1966 could not be completed owing to poor response from the offices.

These people feel secure in their employment and income more than their counterparts in other avocations insofar as they are not exposed to fluctuations in income and employment to their disadvantage. Besides the State and the Central Government employees, there are a considerable number of persons working in private offices, shops and other establishments. According to the 1961 census, the number of persons working in administrative, executive and managerial posts in the private sector was 2,410.

Learned Professions

Persons included in the category of learned professions are medical practitioners, engineers, lawyers, teachers and those engaged in arts and letters. A brief description of each of these occupations is given below :

Medical Profession.—The number of persons engaged in the medical profession has shown a considerable increase during recent years in this district. In 1951, there were about 200 medical practitioners. This figure included those engaged in private practice and those working in Government hospitals. Apart from these, there were 15 Ayurvedic and 13 Unani doctors. In 1961, there were 821 persons classified as persons working in medical and health services. This figure included persons engaged in hospitals, sanatoria, nursing homes, maternity and child welfare clinics and also Ayurvedic, Unani, Allopathic and Homoeopathic practitioners and also those engaged in veterinary services. Of these, 249 persons were physicians, surgeons and dentists and 549 persons were nurses, pharmacists and other medical and health technicians. By the end of 1968, as per the figures furnished by the Mysore Ayurvedic and Unani Practitioners Board, there were 265 Ayurvedic, 20 Unani and 25 Integrated medical practitioners in the district, who had registered themselves with the Board.

Teaching Profession.—Among the learned professions, the teaching profession has attracted a larger number of persons than the other services such as the legal and medical. In 1951, there were 1,174 teachers in different schools in the district, of whom 1,094 were men and 80 women. In 1961, the number of persons engaged in this profession was 2,267 of whom 2,000 were men and 267 women ; out of them, 1,391 were serving in the rural parts. Among these persons, 243 were secondary school teachers and 927 middle and primary school teachers. By the end of 1968, the number of primary school teachers had risen to 2,974

and of these, 2,743 were men and 231 women, while the number of secondary school teachers had increased to 659, including 73 women. In 1951, there was only one Arts and Science College at Raichur where there were 22 lecturers, 19 of them being men and three women. Now there are five colleges in the district imparting general and technical education, where 58 lecturers are working. Besides, the number of teachers employed in the two Technical Training Institutions and the four Teachers' Training Institutions in the district was 80, in 1968. In addition to these, a considerable number of persons are also engaged in other training schools such as tailoring and embroidery and music schools.

Legal Profession.—The legal profession has been drawing an increasing number of persons to its fold. Although the legal career is not particularly lucrative in the beginning for a young man of average education, the fact of its being an independent profession with plenty of opportunities to make a mark, particularly in public life, makes it attractive to ambitious young men. This category includes jurists, lawyers, their clerks and petition writers. In 1951, there were 98 practising lawyers in the district. In Raichur town itself, there were 47 lawyers. In 1961, the number of persons included under legal profession was 251, of whom 141 were legal practitioners and advisers. At present, in Raichur town itself, there are 69 lawyers.

Engineering.—Major irrigational works like the Tungabhadra Project and the Rajolibanda Diversion Scheme and many other minor irrigational works, etc., taken up in the district have drawn a large number of engineers, overseers and draughtsmen into the district. There were 330 engineers, architects and surveyors in the district in 1961. Of these, 234 were civil engineers including overseers. Besides these, there were 90 draughtsmen and other technicians. The demand for such technical personnel has increased during the last few years owing to the various developmental activities of the different departments in the district.

Arts and Letters.—There were 403 artists, writers and related workers in the district in 1961. Of these, 113 were commercial artists, decorators and painters, 51 actors and related workers and 160 musicians and related workers. The dancers included the professional singing girls, a few of whom are still found in various parts of the district; in Raichur town there are three such families. Except a few musicians, who depend entirely on their profession for their living, the others have taken it as a subsidiary occupation.

Among the workers engaged in other occupations, it was recorded in the 1961 census that there were 449 priests and 56 astrologers, palmists and related workers. Many of the religious

workers serve in temples, mosques and churches. Some of the Hindu religious workers attached to temples get only a small amount of honorarium from the temples in addition, sometimes, to the produce they get out of the land set apart for the purpose.

Working Proprietors

A large number of persons are self-employed in their shops and other establishments in the district. According to the 1961 census figures, these persons, classified as working proprietors in wholesale and retail trade, accounted for 11,913, of whom 11,894 were working proprietors in retail trade. A majority of these persons are working in the urban areas where there are chances of having a better business. Of the 11,913 persons coming under this category, as many as 2,254 were women. Many of these working proprietors employ one or a few persons to assist them in running the shops.

Hotels and Restaurants

The hotel and restaurant business in the district of Raichur does not compare favourably with that of many other districts in the State. The growth of this business has been haphazard, as the entire district is still to be developed industrially or economically. Most of the hotels are concentrated in the district headquarters and other towns. In 1957-58, out of a total number of 278 hotels in the district, about 120 hotels were located within the confines of Raichur town. The only possible classification which could be mentioned in a description of the business is that the urban hotels differ from the rural establishments in respect of their size and the variety and quality of the dishes served. The growth of a large number of eating houses in Raichur town is of recent origin dating back to about two decades, and this is perhaps due to the socio-economic changes brought about after the World War II and the transformation noticed in the culinary tastes of the people.

Hotels in the urban areas, *i.e.*, in Raichur and other taluk headquarters, can be broadly classified under two kinds: (1) the better class hotels which provide a standard of comfort and cleanliness that can be said to have come up to a reasonable level and (2) the ordinary establishments. The better class hotels, which are called Tea or Coffee Clubs or 'Bhavans', serve varied fare both in the mornings and evenings. They do their business in rented houses in the busy parts of the town where the people generally congregate. A few of them carry on their business in their own buildings which have been built to suit their particular conveniences.

Self-service hotels are not to be seen in Raichur or other towns. Servers are employed to effect prompt service. Most of the dishes served in these hotels conform to the Udipi type. Sweets and savoury preparations are exhibited in a glass-encased

almirah. Some hotels have refrigerators for serving cool drinks, but they are very small in number. The establishments have a big hall, where 20 to 30 tables are placed, and each table is surrounded by four or five chairs. In some hotels, a few side-rooms are to be seen specially reserved for ladies or families. Marble-topped tables are common in the hotels in Raichur town, since the surface of these tables can be cleaned quickly as and when the customers leave. The equipment of small hotels consists of wooden tables and long benches on which the customers sit. The proprietor and his relations manage the entire business, sometimes with their women assisting them in the culinary preparations.

The cost of equipment in the better class restaurants in Raichur town may be conveniently put at Rs. 10,000, the cost of a refrigerator alone accounting for Rs. 2,500 and the kitchen utensils, plates, spoons and tumblers accounting for another Rs. 3,000. The rest of the amount is utilised for furniture, a radio set and the initial purchase of provisions for running the hotel. The hotels are mostly owned by individual proprietors. Quite a large number of these are from outside the district.

Hotel employees

The staff of the hotel consists of a chief cook, who is paid between Rs. 80 and Rs. 120, a second cook to assist him, five or six servers and about half-a-dozen cleaners and maid servants to wash the vessels, plates and spoons, who are paid between Rs. 50 and Rs. 75. These workers are provided with free boarding and lodging. With the implementation of the Shops and Establishments Act, the service conditions of the hotel employees have been regulated.

Residential Hotels.—Raichur town has yet no proper facilities for catering to the needs of those who seek both boarding and lodging. There are a few places where lodging facilities are provided, but these do not conform to the accepted standards. A big hall is usually partitioned into several compartments and in each compartment a cot and a table are placed. The rates charged for lodging range from one rupee to Rs. 2.50 per day.

Boarding Homes.—Hotels serving meals are located in convenient places in Raichur town. There are some boarding hotels of a cosmopolitan type run by persons from Kerala. Meals are served both in the mornings and evenings. The charges are Re. 1 per meal with limited rice and dishes and Rs. 1.50 to Rs. 2 for a full meal. Monthly tickets are given at concessional rates. The capital invested in bigger establishments does not exceed Rs. 10,000 and a return of about 10 per cent or more is assured in the business. The minimum initial capital required for establishing a boarding home on a modest scale is anywhere between Rs. 1,500 to Rs. 3,000. Meals are sent on request to people who want them at their houses. The charges in this case

are a little higher than the usual hotel meal rate. Curds are supplied on payment of an extra charge of 0.25 paise per cup.

The customers in the boarding houses are of two types— casual and 'permanent' or monthly; 'permanent' boarders are charged at a concessional rate which is slightly lower than the casual rate. The monthly net income derived from a boarding home is somewhere between Rs. 200 and Rs. 1,000. There are also a number of non-vegetarian restaurants (sometimes called 'military' hotels). These are of the ordinary type.

The employment opportunities in these boarding houses are small. The proprietor employs a cook, one or a few servers and one or more servants to clean the plates and tables and they are paid from Rs. 30 to Rs. 100 per month with meals depending upon the nature of the work they turn out. Some of the medium sized boarding homes or *Khanavalis* are housed in rented build ings, the rent being Rs. 75 to Rs. 100. In respect of those which are located in less busy places, the rent is invariably less.

In the mofussil parts, the hotels are housed in ill-ventilated and dark premises, where a long bench is provided for customers to sit. Eatables are generally served on leaves. According to the 1961 census, the number of persons employed as house-keepers, cooks, maid servants, waiters and related workers in hotels and restaurants and similar other establishments, providing boarding and lodging facilities, stood at 3,206, including 267 women. Among these, 1,524 persons were working in urban areas. Out of the total number of these workers, 2,060 were house-keepers, cooks, maids and related workers, and 656 waiters and related workers. In Raichur town, there are, at present, 129 hotels and restaurants and boarding and lodging houses, providing employment to 485 persons.

Bakeries

In almost all the towns, there are bakeries where bread, biscuits and cakes are prepared and sold locally. Most of these bakeries are small in size, each engaging about two to four persons. Many of the bakeries are family establishments run by the owners themselves with the help of the members of their families. The industry has a good scope for development as the demand for bread and biscuits is steadily increasing. In Raichur town, there are 13 bakery establishments providing work to 37 persons.

The raw materials required for the industry are mainly wheat flour and sugar. Wheat and sugar are available within the district itself. The biscuits produced are nutritive, cheap and wholesome and are within the means of a large section of the people in the district. The common type of bread obtained in the bazaar is known as *kulcha, nan* and *shermal*. Slightly

fermented dough is baked in a semi-spherical oven to produce this type of bread. It is nice and palatable and forms the main item of breakfast to quite a large number of people. The English type of loaf-bread is also sold and is in large demand due to the inrush of people from the neighbouring districts and the increase in the number of hotels, restaurants, hospitals and tea-shops. The use of cakes and pastries is also increasing steadily.

The equipment of a bakery consists of a large wooden table to prepare the dough, an oven with its accessories such as tin trays, small iron sheets, boxes, moulds, cupboards and baskets. The cost of equipment ranges from Rs. 500 to Rs. 2,000 depending upon the size of the establishment. Most of the bakeries are housed in rented buildings, the rent varying from Rs. 15 to Rs. 35 per month. Some of the establishments are also housed in the owners' houses. The work is carried on by the physical labour of experienced men and there is no clear-cut division of labour in the process of manufacture. The major portion of the work, which requires skill and entails physical labour, is done by the more experienced and stronger persons and the rest is done by others. The wages of the employees are paid in cash. The monthly wage of an adult employee varies from Rs. 45 to Rs. 75, whereas boys are paid between Rs. 15 and Rs. 30 per month. The earnings of the owners of the bakeries in the district vary depending on the size of their establishments and the quantity of production. In the case of small establishments, the net income ranges between Rs. 150 and Rs. 250 per month and in the case of larger establishments, it is between Rs. 200 and Rs. 500 per month. The products are mostly sold to the hotels and restaurants. Some bakeries maintain their own shops, where they sell their products, and a few bakeries employ boys for selling their goods from door to door.

Tailoring

The occupation of tailoring has been attracting a large number of persons to Raichur, Koppal, Deodurg, Gangavati, Manvi and other important towns in the district, though a few of them continue to have their business in the rural areas. In 1961, the district had, in all, 3,160 tailors, cutters and related workers, of whom 1,373 lived in the urban areas. The Inspector of Shops and Establishments maintains the statistics of tailoring firms in respect of taluk headquarters towns. According to the figures furnished by him, there are, at present, 26 tailoring firms in Raichur town apart from other individual tailors. A majority of these tailoring firms are small establishments where the owners, with the help of two or three of their relations, carry on the work. There are quite a few one-man establishments. In bigger concerns, some 5-6 persons are engaged on either time-wage or piece-wage basis. Some merchants, especially cloth merchants, accommodate a tailor or two in the corners of their shops. This occupation provides employment throughout the year. However,

there will be brisker business during the marriage and festival seasons. There is no division of labour in the process of work in respect of small firms, but in large firms, it is followed to some extent. The owner or the specialist of the tailoring firm takes measurements, cuts the cloth according to the size and stitches only a few important clothes like woollen or silk coats and trousers. The other workers stitch ordinary clothes. Minor functions like preparing button-holes and stitching of buttons are attended to by boys who are taken as learners.

The equipment of a tailoring establishment consists mainly of sewing machines, scissors, tables, cupboards and ironing machines. The capital investment ranges from Rs. 500 to Rs. 2,000 in the case of smaller firms and from Rs. 2,000 to Rs. 4,000 in the case of larger establishments. Some large establishments, which have prospered in this occupation, have also been supplementing their income by selling cloths and ready-made garments. Sewing machines are generally purchased on instalment basis from the agents of the manufacturing companies.

Most of the tailoring firms are housed in rented buildings. They occupy from one to three rooms, small or big, according to the size and the business of the concerns. The rent varies in case of small firms from Rs. 10 to Rs. 25 per month and in the case of large establishments from Rs. 25 to Rs. 50 per month. But a few big firms, situated in busy and important localities, have to pay more rent. Customers usually purchase the cloth and give it to the tailors for stitching. The other materials required by the firms are—cloth for lining, buttons, ironing machines and needles. These materials are purchased in the local markets and their cost ranges from Rs. 20 to Rs. 300 per month, according to the size of the business of the firm. The value of the business done daily varies from Rs. 10 to Rs. 75 on an average according to the size of the firm. The charges for stitching a cotton suit generally varies from Rs. 12 to Rs. 18 while that of a woollen suit from Rs. 60 to Rs. 100. During the marriage and festival seasons, a few leading firms in the urban areas of the district do very good business, sometimes to the extent of Rs. 100 to Rs. 250 a day.

Laundry

The number of laundries in 1957-58 in Raichur town was about 30 and each of the other towns in the district had about 8 to 10 laundries. Most of these are family concerns, where the owners carry on their business assisted by the members of their family and only the bigger establishments make use of hired labour. According to the 1961 census, there were 3,305 persons in the district who were engaged in this occupation. This figure included launderers, dry cleaners and pressers. With the development and growth of the towns, the number of laundries has been on the

increase. In Raichur town, most of the laundries are comparatively better-equipped. The equipment, in most of the laundries, consists of one or two iron boxes, one or two large tables for ironing and two or three show-cases for keeping washed clothes, the total cost of which varies between Rs. 300 and Rs. 600. The raw materials required to carry on the work are soap, washing soda, blue powder, petrol and charcoal. The total cost of these substances is estimated between Rs. 75 and Rs. 150 per month in an average concern. In the large concerns, where outside workers are employed, the wages paid for a washerman is between Rs. 60 and Rs. 100 a month.

The majority of the laundries are housed in rented premises, consisting of one or two rooms. The monthly rent varies from Rs. 15 to Rs. 30 in places like Raichur, Koppal and Gangavati and slightly less in other urban parts of the district. The old system of house delivery of washed clothes is still prevalent, besides delivery at the laundries, particularly in Raichur town. In the rural areas, the washermen are paid sometimes in kind. Poor people generally do not give their clothes to laundries for washing. Some of the middle-class people and almost all the people of the upper strata of the society get their clothes washed in laundries. The occupation, which is mostly hereditary in character, provides full-time employment throughout the year, but the business is usually slack during the rainy season. The income of the laundries ranges from Rs. 100 to Rs. 500 per month depending upon the size of their business. The rates charged per clothe vary from 12 to 15 paise for an ordinary wash and 25 to 30 paise for an urgent wash. The earnings of the laundries, which are specialised in dry-cleaning of clothes, are naturally higher.

Hair-cutting saloons

There are, at present, 46 hair-cutting saloons in Raichur town. About half of the workers engaged in this trade are paid employees, the rest being the owners and their family members. Most of the persons engaged in this service in rural areas are independent workers. In towns, these establishments are distributed in several localities. Most of these establishments are located in rented buildings. The rent for the building ranges from Rs. 20 in the case of those situated far away from the bazaar area to about Rs. 60 per month in the case of those situated in important and busy localities.

The equipment consists of a couple of chairs, big mirrors, scissors, razors, combs, cropping machines, pincers, nail-parers and leather straps to sharpen the razors. The cost of the equipment ranges from Rs. 200 to Rs. 1,000 in the case of small shops and from Rs. 1,000 to Rs. 2,000 or even more in the case of bigger ones. The saloons have to incur current expenditure on soap, oil, face powder and other toilet requisites and also on lighting charges. The average daily expenditure varies from rupee one to

Rs. 10 according to the size of the business of the saloons. The average daily earning of an independent barber may be put at Rs. 3 to Rs. 5. The monthly income of small establishments is about Rs. 100 and that of medium-sized establishments ranges between Rs. 150 and Rs. 250. The larger establishments earn more than Rs. 300 per month. Almost all the people, except the very orthodox and the very rich, are habituated to get their hair cut in saloons. Such of those who call the barbers to their houses for getting their hairs cut generally pay a little more than the prevailing market charges. In 1961, the district had 1,370 barbers, hair-dressers and related workers, of whom 973 were in rural parts. The work of the barbers becomes necessary also at certain Hindu religious ceremonies like *Chudakarma* and funerals. Another significant feature of this profession is that many of the barbers have taken to the practice of instrumental music.

Florists

Florists are not many in Raichur as the dry climate of the district is not generally suited to the growing of flowers. Flowers are imported from Bangalore and other places and made into strings and sold. Loose flowers are also offered to customers. Flowers are costly and the business is also dull. The trade is carried on by a few as an occupation to supplement their income. Wholesalers get these flowers largely from Bangalore and offer them to the retailers.

Cycle Rickshaws and Tongas

The plying of cycle rickshaws and tongas for hire provides employment to many persons in the urban areas of the district. Cycle rickshaws have become very popular in towns and the man who pedals the rickshaw earns a good wage. There are about 40 cycle rickshaw dealers and about 20 persons employed in them in Raichur town. In the majority of cases, the rickshaws are owned by others who lend them for a fixed sum of about Rs. three a day. The driver usually earns about six to eight rupees a day inclusive of what he has to pay to the owner of the rickshaw. On days of festivity, he naturally gets a larger income. The profession calls for great physical exertion since it is no easy job to pedal a rickshaw with two passengers sitting in it. The cycle has to be kept in good condition and the hirer is answerable to the owner for any loss of spare parts. The fare charged is usually 30 paise a mile. The income from the plying of cycle rickshaws varies according to the season. In summer, it is slack because of the heat. But good business is seen during the winter months. The income also depends upon the individual capacity of the driver and the opportunities that occur from day to day. In 1961, the district had 281 persons working as cycle rickshaw drivers and rickshaw pullers. Almost all of them, nearly 270, were living in urban areas. But by the end of April 1969, the number of persons engaged in this profession had gone up considerably, in that there were about 500 rickshaws in Raichur town alone.

With the increasing popularity of cycle rickshaws, the tongas, which were once the principal means of transport in the urban areas, have decreased in number. The customers prefer cycle rickshaws to tongas, because the former are a quicker and cheaper means of transport. The tongas are driven mostly by men who own them. A sum of at least six rupees has to be earned daily in order to keep the owner comfortable and also the horse in fit condition. The rate charged for a distance of two miles is anywhere between Rs. 1-50 and Rs. 2-50.

Bhatar-making

Bhatar-making is an important rural occupation in Raichur district. Bhatar is usually made out of fibre woven into a thick rope. When tied in squares, it serves as a container of cotton. Cotton is grown on an extensive scale in Raichur district and it cannot be transported from place to place unless packed in containers. Bhatar containers have become very useful in this connection. The extraction of fibre from fibre-yielding plants such as *embada* is followed as a subsidiary occupation by the people in the rural areas. The average price of a single bhatar varies from about Rs. 5 to Rs. 8. The monthly net income of a bhatar-making establishment varies from about Rs. 150 to Rs. 250. Bhatar-making is a cottage industry providing employment to a large number of persons, both as a full-time and subsidiary occupation, affording good scope for the skill of the persons employed in it.

Agarbathi manufacture

Agarbathis and sandalwood sticks are used as incense for worship and also on special occasions like festivals, marriages, etc. Either in a smaller or a bigger measure, almost every domestic household has a demand for this product. In spite of this good demand for agarbathis, the industry has not been developed to any appreciable extent in Raichur district. There are, at present, only four establishments in Raichur town manufacturing agarbathis. This business holds out some promise of development, provided adequate financial help is made available to the manufacturers. Out of these four establishments in Raichur town, three are in Somwarpet and one is in Jahamia Mohalla. The raw materials required for the industry are scent, charcoal powder, sandalwood powder, bamboo, gum and wrapping paper. The total cost of production for an average establishment varies from Rs. 300 to 600 per month. This sum includes the amount paid for the raw materials, the rent for building, transport and other charges. Both men and women are employed and the average earning per day of an employee is about two rupees. The process of manufacture consists in making a dough out of a mixture of charcoal powder, scent, gum and sandal powder in suitable proportions and pasting the mixture around long thin sticks of bamboo of about 9″ in length. The process, which is apparently simple but involves considerable skill, is mostly done by women. There is considerable profit in this

occupation; but in Raichur district, the number of persons engaged in this industry is very small and is only a subsidiary occupation.

Attar manufacture

For the manufacture of attar, the sweet scent of the flowers, such as rose, jasmine and keora, rausa grass, champa, the roots of khas grass and ambergria is extracted by the same process as in the distillation of liquor, but the sandalwood oil is placed in the receiver of condensed vapour as base for holding the volatile oil of flowers. Sandalwood oil is available from Mysore and the essential oils from rose and keora are obtained from Hyderabad and Bombay. There are a few Muslim families in Raichur town engaged in the manufacture of attar, which is extensively used by the Muslims during their festivals.

Cycle shops

The number of bicycles in use has been steadily increasing both in the urban and the rural areas of the district. On an average, a big cycle shop has about 15 to 20 bicycles for hire, each costing between Rs. 150 and Rs. 300. Other equipment consists of spanners, air pumps, screw drivers, hammers, puncture solution, grease, and also spare parts like tyres, tubes, bells and seats. The value of the equipment in the case of the larger establishments may be estimated at Rs. 5,000 to Rs. 10,000 and in the case of small ones between Rs. 750 to Rs. 1,500. The minimum working capital required in the case of bigger establishments may be estimated at about Rs. 500 and about Rs. 250 for the smaller ones. The net income in the case of the larger establishments could be estimated at Rs. 500 to Rs. 750 per month, which is made up of the money derived from hiring of bicycles and also of the sale of cycle accessories besides repair charges. The net income of the smaller establishments may vary between Rs. 100 and Rs. 250 per month.

Building-stone industry

The building-stone industry has a very good scope for expansion as there is abundant good material available in the district. Raichur and the neighbouring places abound in rock-hills noted for their quality stones. In certain places near Raichur and Munirabad, a variety of granites has been found which is said to be superior to the famous Aberdeen granites. The many historical edifices, forts, temples and mosques are the standing monuments to the quality, durability, beauty and variety of the building stones available in the district. The work of quarrying and cutting of stones has been the occupation of a fairly large number of people in the district, called *Voddars*. Their equipment consists of hammers, chisels, tapes and levelling instruments, the cost of these ranging between Rs. 30 and Rs. 75. A classification of stone-cutters can be made under two heads: (1) those who possess their own carts and bring stones from the places where they are available and sell them after cutting and polishing and (2) those who are purely wage-earners engaged in cutting and

polishing the stones. Those who belong to the first category, have to invest a sum of Rs. 500 to Rs. 750 or even more for the cart and the bullocks. Persons belonging to this category are not many since most of the persons are only wage-earners. The average net income of those who possess their own carts, varies between Rs. 150 and Rs. 250 per month. Wage-earners get about Rs. 2 to Rs. 5 per day. As per the 1961 census figures, there were 2,217 stone-cutters, stone-carvers and stone-dressers in the district.

Among the other construction workers, there were 2,607 brick layers, plasterers and masons. The average daily wage of the workers engaged in this work varies from Rs. 3 to Rs. 5. These persons are engaged in the construction of bridges, buildings, tanks and anicuts. They generally work under big contractors who would provide them work throughout the year. Women and boys are engaged for attending to light work where physical strain is not great. Bricks are baked and sold to the public in towns. As there is dearth of fuel in the district, the cost of the burnt bricks is more.

Carpentry

Carpentry has been an old industry in the district. A large number of carpenters in the villages manufacture agricultural implements and attend to their repair work also. The old practice of paying the carpenters for their work in kind during the harvest season is still found in many of the villages of the district. The carpenters work either in their houses or in sheds attached to their houses in the villages, while a few of them own shops in towns. In Raichur town, there are three such big shops. Most of the carpenters are independent workers. Sometimes, they work under a master craftsman or a contractor who would pay them daily wages. The rates of wages depend upon the skill of the workers and also vary from place to place. A well-skilled worker gets from Rs. 4 to Rs. 6 per day whereas a less skilled worker gets Rs. 2.50 to Rs. 4 per day on an average. Minor works are attended to by boys who are taken to work as helpers. Such boys are paid about Rs. 2 per day, on an average. According to the 1961 census, there were 3,327 carpenters, joiners, cabinet makers and related workers in the district; of these, 2,639 were engaged in wood works.

Blacksmithy

Blacksmithy, like carpentry, is also an old industry prevailing in the district. In 1961, there were 1,146 blacksmiths and related workers. Among these, 905 persons were working in rural parts where their services are greatly needed by the cultivators. Blacksmiths are engaged in manufacturing and repairing agricultural implements like plough-share, sickle, weeding-hook, etc. The work involves a certain amount of division of labour wherein at least three persons are required to carry on the work, *viz.*, a hammer-man, a forger and a man to handle the bellows. They

work in sheds attached to their houses. The equipment consists of iron sheets and rods, hammers, an anvil, bellows, etc., the cost of which varies from Rs. 500 to Rs. 1,500. In the rural areas, the work is largely seasonal and they have brisk work during the time of preparatory tillage and again at the harvest season. The old practice of paying the blacksmiths in kind for their work is still in vogue in a few villages; but now they are mostly paid in cash. On an average, a blacksmith earns about Rs. 1.50 to Rs. 4 per day.

Goldsmithy

The number of goldsmiths in the district was 1,302 in 1961. This figure included jewellers and silversmiths. There are, at present, about 50 goldsmithy and silversmithy establishments in Raichur town. Most of these persons have taken this as a hereditary occupation. The equipment of a goldsmith consists of an anvil, bellows, hammers, crucibles, moulds, saws and scissors. The cost of the equipment ranges from Rs. 300 to Rs. 600 in respect of a small artisan, but in respect of large establishments it goes up to Rs. 2,000. Goldsmiths and silversmiths manufacture different kinds of ornaments either on demand by the local inhabitants or on the basis of the orders given by sharoffs. In view of the special skill required for this work, boys are made to work under the head of the family or under a master craftsman, for several years. Most of the goldsmiths and silversmiths are independent workers. They work in their houses or shops attached to their houses. In larger establishments, however, there is some kind of division of labour. Skilled craftsmen earn about Rs. 100 to Rs. 200 per month on an average. Due to the introduction of gold control measures in 1963, many of these goldsmiths were affected. The Government have been helping them by free grants of lands for agricultural purposes, providing educational and training facilities for their children, granting liberal loans for starting cottage industries, etc. However, the recent relaxation of the gold control measures has further eased the situation.

Pottery

Manufacture of earthen-ware is one of the oldest rural occupations which has been hereditary in character. According to the 1961 census, there were 1,363 potters, glass and clay formers and related workers in the district. Among these, 1,275 persons were potters and related clay-formers. Since this is mainly a rural occupation, a large number of these potters were found in the rural parts where the demand for their products is large. The potter is helped in his work by the members of his family. Availability of fine clay in the vicinity of the village, where the potters work, is of importance to them as it reduces the cost of transport. They take the finished products to the nearby fairs and shandies and sell them. The average daily earning of a worker ranges from Rs. 1.50 to Rs. 4.

Transport workers

According to the 1961 census, the number of persons engaged in transport and communications in the district stood at 2,639, most of them being in the urban areas. Among them, 1,675 were drivers in road transport and 132 inspectors, supervisors, traffic controllers and despatchers. In Raichur town, there are, at present, five transport agency establishments providing work to about 40 persons.

Farm-workers

A considerable number of persons in the district are engaged as farmers and farm-workers, other than agricultural. The 1961 census has returned 9,762 as farm-workers and 97 farmers and farm managers. (Persons working in poultry farms, those engaged in the rearing of other animals and birds and those working in plantations are also included in this figure). Of the former, 8,123 were men and 1,639 women. Out of the total number of these workers, 654 persons were working in urban areas.

Spinners and Weavers

The district of Raichur had 8,184 spinners, weavers, knitters, dyers and related workers in 1961; of these, 3,919 were females. Included in this total figure were 2,680 drawers and weavers, 369 carpet makers and finishers and 952 spinners, piecers and winders. These workers were distributed all over the district. There is much scope for division of labour and specialisation among weavers and spinners. Generally, the family works as a unit. The equipment consists of a loom, spinning wheels, warping and dobby machines. The initial cost of the equipment of an ordinary establishment varies from Rs. 500 to Rs. 2,500. The work requires a special skill and patience on the part of the workers. (*See* also Chapter V).

Leather workers

The total number of leather-workers in the district in 1961, including shoe-makers and shoe-repairers, was 688, of whom 653 were shoe-makers and shoe-repairers. There are, at present, three leather works and 15 shoe-shops, employing about 12 workers (besides owners and their relatives attending to the work), apart from a number of independent workers in Raichur town. Some cobblers sit at the end of the street in a busy place and attend to minor repairs, while others work in shoe-shops on daily-wage basis. A worker earns about Rs. 1.50 to Rs. 3 per day. The shoe-making industry was very popular in Raichur town, as the Apa-shahi and Salim-shahi shoes were formerly in considerable demand by the well-to-do classes of the society. Now most of the shoe-shops get shoes and other allied finished products from Hyderabad, Bombay and Bangalore and sell them to the public on commission basis. (*See* also Chapter V).

Tool-makers

There were 1,331 tool-makers, machinists, plumbers, welders, platers and related workers in the district in 1961. These also included mechanics and repairmen, who numbered 473. Nearly half of the total number of these persons were working in urban parts

In Raichur town, there are seven engineering establishments providing employment to 24 persons. In addition to these engineering workshops, there are 12 other establishments dealing in machinery parts and attending to repair work, employing about 35 workers. The repair work consists of overhauling of machines, battery-charging and replacement of parts. The equipment consists of lathes, battery-charging plant, electric drills, tools, jacks, presses, testing and measuring instruments, etc. The cost of the equipment in these establishments ranges from Rs. 5,000 to Rs. 12,000. The average net income of these establishments varies from about Rs. 300 to Rs. 600, depending upon the size of the establishment and the nature of the work it turns out. The average daily earning of a worker varies from Rs. 3 to Rs. 6 per day. Most of the unskilled workers are taken on monthly salary basis, ranging from Rs. 50 to Rs. 80.

Basket-making

Basket and mat-making is another old industry which provided employment to 3,593 workers in the district in 1961. They make baskets out of bamboo and mats from the leaves of date palms. One of the significant features of this industry is that the work is attended to largely by women. Out of the total number of these workers, 2,729 were women and 864 men. Most of these workers live in rural parts. (*See* also Chapter V).

A statement showing the occupational classification of persons at work, other than cultivation, in the district, in 1961, is given in the Appendices.

CHAPTER IX

ECONOMIC TRENDS

THE district is on the threshold of a rapid economic development. The years since 1951 have seen intense developmental efforts under the successive Five-Year Plans. The economic betterment of any district depends largely on the local natural resources. The advantages of situation of natural resources, the skill acquired by the people for putting them into productive use, the accumulated savings of the people for being ploughed back, the credit that the people command, a spirit of enterprise and constant efforts at improvement of productivity, both collective and individual, are some of the important factors.

Bright future

Raichur is one of those districts which have been subject to periodical scarcity conditions. Keeping this in view, its economic growth has been well-planned in recent years having regard to its potentialities in the fields of irrigation, agriculture, industries, communications, etc. The mighty Tungabhadra Project and many programmes carried out under the Five-Year Plans have brought about developments of a far-reaching importance and have laid the foundation for its future prosperity. A study of the development of the economy of the district, in recent years, reveals a fascinating picture. Life has become more active and the people have been enthused and encouraged to work better for their economic progress. Their horizon has been widened by the various developments that have taken place. They are now in a position to forget the days of famines and frustrations and are able to look forward to a bright future. A remarkable progress has been achieved in various spheres of development—particularly in the fields of irrigation and agriculture—the details of which have been given in relevant chapters of this volume. "Raichur is a district with a great future. With about 10 lakh acres under irrigation, the district is destined to be the most prosperous district in the whole State in the agricultural field. In fact, it may become one of the most prosperous districts in the whole nation like Tanjore in Madras and Ludhiana in Punjab. In the wake of agricultural development, a large number of agro-industries are bound to develop. The district will naturally be a granary for the whole State as it will produce large quantities of paddy, jowar, wheat,

cotton, groundnut and pulses"[1] writes the Deputy Commissioner of the district.

Backwardness

Yet, as at present, on the whole, the district is found to be backward, when compared with several other districts of the State. The State Bureau of Economics and Statistics has ranked the districts of the State taking into consideration certain important economic indicators suggested by the Planning Commission. These indicators have been assigned weights in proportion to their importance. "In view of the importance of irrigation and in view of the importance of the diversification of the economy, the indicators, 'percentage of the net area' and 'percentage of workers in agricultural sector to total workers', are assigned comparatively heavy weights. Similarly, in view of the economic importance of 'double cropped area' and 'number of workers in the registered factories per lakh of population', these two indicators have also been accorded relatively higher weights."[2] The weighted mean ranking of the districts put Raichur in the 10th place among the 19 districts of the State. (According to this weighted mean ranking, Gulbarga, Bidar, Bijapur and Raichur ranked as the most backward districts in the State). Per capita income is another indicator of the level of development of an area at a given time. The Raichur district with its per capita income of Rs. 267 occupied the 13th place among the districts of the State, the first being Coorg with Rs. 558 and the last being Bidar with Rs. 223.[3]

A study of the livelihood pattern of the people, price and wage levels, cost of living at different points of time, income and expenditure patterns, progress achieved in different fields of development and the employment level would help us in understanding the trends in the economic field in the district. In dealing with these aspects, we have also to bear in mind what has been said in some of the chapters, especially on agriculture and irrigation, industry, banking, trade and commerce, communications, miscellaneous occupations, education and culture and medical and public health services.

Livelihood pattern

Raichur being predominantly an agricultural district, a majority of the people derive their livelihood from agriculture. According to the 1961 census, 77.4 per cent of the population depended on agriculture for their livelihood and only 22.6 per

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1. "Raichur—A Developing District" by Shri Jayakumar Anagol, M.A., I.A.S.,—an article in the Souvenir of the 34th Mysore State Medical Conference, Raichur, October 1967.

2. Fourth Five-Year Plan (1969-74)—A Draft Outline, Government of Mysore, October 1968.

3. Figures relate to 1960-61.

cent on non-agricultural sources. Out of 6,91,482 people who depended on agriculture, 56.7 per cent depended on cultivation of land wholly or mainly owned and 4.4 per cent on cultivation of land wholly or mainly unowned. Cultivating labourers formed 12.2 per cent and people who depended upon agricultural rent formed 4.1 per cent. With regard to the non-agricultural sources, seven per cent of population depended upon production other than cultivation, four per cent on commerce, one per cent on transport and 10.6 per cent on other services and miscellaneous sources. As regards the proportion of self-supporting persons and dependents, only 25.15 per cent of the agricultural classes were self-supporting while 17.78 per cent formed earning dependents and 57.07 per cent non-earning dependents.

Among the non-agricultural classes, 32.77 per cent were self-supporting persons, while 10.91 per cent were earning dependents and 56.32 non-earning dependents. According to the 1961 census, the total population of the district was 11,00,895, out of whom more than 50 per cent belonged to the category of non-workers; the total working population was 5,12,061, out of whom, 4,51,329 belonged to the rural sector and 60,732 to the urban sector. As for percentage distribution of the working force between primary, secondary and tertiary sectors, the primary sector claimed 77.1 per cent, secondary sector only 8.9 per cent and tertiary sector 14.0 per cent. The distribution of working population of the district according to means of livelihood as in 1961 was as given below :—

Sl. No.	*Occupation*	*Number of persons*	*Percentage*
1.	As cultivators	2,87,420	56.13
2.	As agricultural labourers	1,05,088	20.52
3.	In mining, quarrying, livestock, forestry, fishing, plantations, etc.	2,808	0.55
4.	In household industry	33,385	6.51
5.	In manufacturing other than household industry	5,293	1.03
6.	In construction	6,342	1.24
7.	In trade and commerce	15,448	3.02
8.	In transport, storage and communications ..	3,480	0.68
9.	In other services	52,797	10.31
	Total ..	5,12,061	..

In this context, it would be of interest to note the following corresponding figures of 1961 in respect of the Kushtagi taluk which is not benefited by the Tungabhadra irrigation project :—

Sl. No.	Occupation	Number of persons	Percentage
1.	As cultivator	31,816	65.27
2.	As agricultural labourers	8,119	16.60
3.	In mining, quarrying, livestock, forestry, fishing, plantations, etc.	34	0.06
4.	In household industry	4,821	9.85
5.	In manufacturing other than household industry	214	0.43
6.	In construction	233	0.44
7.	In trade and commerce	1,079	2.11
8.	In transport, storage and communications ..	88	0.17
9.	In other services	2,493	5.07
	Total ..	48,897	..

No noticeable change had taken place during the ten years between 1951 and 1961 in the overall livelihood pattern of the district and agriculture continued to be by far the main occupation of the people, since the development was mainly in the fields of irrigation and agriculture. In this connection, the following particulars revealed by the Survey* of Yerdona in Gangavati taluk, a typical village benefited by the Tungabhadra irrigation project, would be interesting :—

Occupation	1951		1961		Remarks
	Number of persons	Percentage to total population	Number of persons	Percentage to total population	
I. Agricultural Class—					
(i) Cultivation of owned lands.	941	77.0	1,296	79.6	+2.6
(ii) Cultivation of lands taken on lease.	70	5.7	75	4.6	— 11
(iii) Agricultural labour.	74	6.0	79	4.8	—1.2
II. Non-Agricultural Class—					
(i) Household industry	46	3.7	46	2.8	—0.9
(ii) Others ..	92	7.6	132	8.2	+0.6
Total ..	1,223	100	1,628	100	

* Village Survey Monographs—No. 10, Yerdona Village, Census of India, 1961, Volume XI, Mysore.

Prices

The average prices of agricultural produce that prevailed in the district in the latter part of the last century can be gathered from the old Settlement Reports. When compared with the present day prices, they show a phenomenal difference and highlight the tremendous distance that the prices have travelled upward since then. The following statement gives the rates at which various commodities were sold in Raichur taluk during the years 1871, 1872, 1875, 1878, 1881, 1885 and 1887, which give also some idea of the fluctuations in prices during that period :—

Name of Commodity	1871 (1280 *Fasli*)	1872 (1281 *Fasli*)	1875 (1284 *Fasli*)	1878 (1287 *Fasli*)	1881 (1290 *Fasli*)	1885 (1294 *Fasli*)	1887 (1296 *Fasli*)
1	2	3	4	5	6	7	8
			(In Seers per Hali Sicca Rupee)				
Rice ..	12	10½	13	5½	11	13	13
Jowar (white) ..	18	16	21	7	30	20	26
Jowar (red) ..	18	20	25	10	32	26	30
Wheat ..	8	6	9½	7	14	18	18
Gram ..	7½	7	14	10	14	20	16
Tur ..	10	12	27	12	10	20	23
Mung ..	10	8	17	8	19	16	18
Til-seed ..	35	40	45	9	15	13	12
Linseed ..	18	20	25	6	10	13	12
Malki ..	14	15	23	12	20	27	21
Kulthi ..	15	14	24	10	25	30	25
Balla ..	24	26	26	11	16	16	18
Ooduth ..	8½	7	12	..	17	13	13
Chillies ..	7	4	3¾	6	7½	8	8
Seed cotton ..	15	12	15	11	12	9	12
Cotton exclusive of seed (wool cotton). ..	3¼	3	3½	2¾	3½	2¼	3

The Revision Settlement Report (1964) of the Lingsugur Zone comprising Lingsugur, Sindhanur and Manvi taluks throws further light on this aspect. A study of the retail and wholesale prices for 30 years from 1933 to 1962 " will indicate that from 1933 to 1940, which was a period of economic depression and slump, the prices of principal crops of the Zone were steady although when compared with those of the previous years they had declined considerably," according to the Revision Settlement Report of Lingsugur Zone (1964). During and after the end of the Second World War, the prices were rising. This upward trend reached such a stage that the need for measures to check this trend was felt very much. Steps to control essential commodities and to introduce a rationing system were taken about the year

1943. Compulsory procurement of foodgrains was also introduced and anti-hoarding measures were undertaken.

Spiralling tendency

Further, "Despite control of foodgrains in 1952 and 1953 and opening of fair-price shops", observes the Report referred to above, "prices refused to come down and the spiralling tendency persisted with vengeance......

"There is a world of difference between the prices of agricultural produce prevailing at the time of previous Revision Settlement and to-day. When we look at the prices of 1933 and those in 1960, we find that the prices of khariff jowar, rabi jowar and bajra have multiplied 7 to 8 times, groundnut, sesamum and cotton 5 to 8 times respectively. It could be observed from the prices given in Form No. 6 that prices for principal crops have not varied to any appreciable extent from taluk to taluk".

The prices, both retail and wholesale, of different commodities that prevailed in Lingsugur taluk for 30 years from 1933 to 1962 were as given in the subjoined table :—

Prices of Principal Crops prevalent in Lingsugur taluk from 1933 to 1962

Retail Prices

Year	*Seers of 80 tolas per rupee*					
	Khariff Jowar	*Bajra*	*Groundnut*	*Sesamum*	*Rabi Jowar*	*Cotton*
1	2	3	4	5	6	7
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1933 to 1939	24—00	22—00	8—10	4—04	20—00	12—00
1940 ..	24—00	22—00	7—00	3—04	20—00	10—00
1941 to 1943	20—00	18—00	7—00	3—04	16—00	10—00
1944 ..	18—00	10—00	7—00	3—04	13—00	10—00
1945 to 1947	17—08	16—00	7—00	3—04	13—00	10—00
1948 ..	17—08	16—00	6—00	3—04	12—08	10—00
1949 ..	17—08	16—00	7—00	3—04	12—08	10—00
1950 ..	15—08	14—00	7—00	3—04	12—08	8—00
1951 ..	15—08	14—00	5—00	2—08	12—08	8—00
1952 to 1953	15—08	14—00	5—00	2—08	8—00	8—00
1954 to 1955	10—00	8—00	5—00	2—08	5—00	8—00
1956 ..	10—00	8—00	3—00	1—08	5—00	8—00
1957 ..	8—00	6—00	3—00	1—08	4—00	6—00
1958 ..	8—00	6—00	3—00	1—04	4—00	6—00
1959 ..	3—00	3—00	2—00	1—04	2—08	1—06
1960 ..	3—00	3—00	2—00	1—00	2—08	1—06
1961 to 1962	3—00	2—08	2—00	1—00	2—08	1—06

Wholesale Prices

Year	Khariff Jowar	Bajra	Groundnut	Sesamum	Rabi Jowar	Cotton
	Rupees per maund of 3,200 tolas					
1	2	3	4	5	6	7
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1933 to 1939	1 67	1 82	4 64	9 41	2 00	3 31
1940 ..	1 67	1 82	5 69	12 30	2 00	4 00
1941 to 1943	2 00	2 25	5 69	12 30	2 50	4 00
1944 ..	2 25	3 00	5 60	12 30	4 00	4 00
1945 to 1946	2 28	3 00	5 60	12 30	4 00	4 00
1947 ..	2 28	4 44	5 69	12 30	4 00	4 00
1948 to 1949	2 28	4 44	5 69	12 30	5 00	4 00
1950 ..	2 58	4 44	5 69	12 30	5 00	5 00
1951 to 1953	2 58	8 00	8 00	16 00	10 00	5 00
1954 to 1955	4 00	10 00	8 00	16 00	13 00	5 00
1956 ..	4 00	10 00	13 33	26 67	13 33	5 00
1957 ..	5 00	6 67	13 33	26 67	16 00	6 67
1958 ..	5 00	6 67	13 33	32 00	16 00	6 67
1959 ..	13 33	13 33	20 00	32 00	16 00	20 00
1960 ..	13 33	13 33	20 00	40 00	16 00	29 00
1961 to 1962	13 33	16 00	20 00	40 00	16 00	29 00

The prices have shown a rising trend in the present decade also. From the table relating to the harvest prices of certain crops, given below, it can be seen that the rise was very steep during the year 1965-66. However, during the year 1966-67, the prices of jowar, bajra and wheat and during the year 1967-68, the prices of paddy, wheat, cotton and groundnut had declined. The harvest prices of important crops in the district during the years from 1964-65 to 1967-68 are given below :—

Crop	1964-65	1965-66	1966-67	1967-68
	(Rupees per quintal)			
Paddy ..	45	66	68—33	64—00
Jowar (Rabi)	52	79	70—22	74—00
Bajra ..	62	60	56—64	61—00
Wheat ..	69	157	142—78	137—00
Gram ..	102	132	N. A.	135—00
Cotton ..	119	159	171—70	151—00
Groundnut ..	73	139	152—33	113—29

Wages

The wage index of any area is linked with the price-line and when the prices of commodities increase, the wages paid have also to be raised. Accordingly, with the rise in prices of articles produced, especially the agricultural commodities, the wages have been going up in the district, though not commensurate with the levels of prices.

We can have some idea of the rates of wages in the 1880s from the particulars provided in the Settlement Report (1885) of the Kushtagi taluk. The report says: "Hired labour can be had at the rate of 3 annas per day per man and 2 annas per woman during the harvest; in all other times, the wages for men and women amount to 2½ annas and 1½ annas each respectively. If labour is engaged by a yearly contract, a man gets 40 to 50 rupees per annum, or Rs. 20 to 25, besides his daily food". From the information available, it was gathered that from 1933 to 1939, wages maintained a steady level and then registered a rise in 1940. The 1940 level was maintained upto 1943. Then there was again a rise in 1944. From then on upto 1962, wages went up in every third or fourth year. The increase in wages in 1962 from the 1933 level was about 400 per cent for men in Lingsugur and Sindhanur taluks, while for women the increase was only 294 per cent in Lingsugur taluk and 400 per cent in Sindhanur taluk. But the rise was more for women labourers than men labourers in Manvi taluk with an increase of 248 per cent for women and only 238 per cent for men. The lower percentage of increase of wages in Manvi taluk was attributed to higher level of wage rates already existing in that taluk in the year 1933 itself. "With certainty, we can state that increase in the prices of agricultural commodities has been more or less double than that of wages."* The year-wise details of wages that prevailed during the period from 1933 to 1962 in Lingsugur, Sindhanur and Manvi taluks are as given below :—

Year	*Lingsugur taluk*		*Sindhanur taluk*		*Manvi taluk*	
	Men	*Women*	*Men*	*Women*	*Men*	*Women*
1	2	3	4	5	6	7
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1933 to 1939 ..	00—25	00—19	00—25	00—15	00—37	00—25
1940 to 1943 ..	00—38	00—25	00—25	00—15	00—50	00—37
1944 to 1946 ..	00—50	00—31	00—38	00—25	00—62	00—50
1947 to 1950 ..	00—63	00—38	00—50	00—38	00—75	00—62
1951 to 1954 ..	00—75	00—38	00—75	00—63	1—00	00—75
1955 to 1958 ..	1—00	00—63	1—00	00—75	1—00	00—75
1959	1—25	00—75	1—00	00—75	1—00	00—75
1960	1—25	00—75	1—00	00—75	1—25	00—87
1961	1—25	00—75	1—00	00—75	1—25	00—87
1962	1—25	00—75	1—25	00—75	1—25	00—87

*Revision Settlement Report (1964) of Lingsugur Zone

Wages have kept on rising after 1962 as well. It was about Rs. 2 for men and Rs. 1.25 for women during the peak season and Rs. 1.50 and Re. 1, respectively, during the slack season in 1964-65. The particulars of wage rates for that year are given in the following table* :—

Period	Daily wage rate (in rupees)		
	Un-skilled work		Piece rate for earth work
	Men	Women	Men
	Rs. P.	Rs. P.	Rs. P.
June to January (8 months) —Peak season.	2—00	1—25	2—25 per 100 C.ft.
February to May (4 months) —Slack season.	1—50	1—00	1—75 per 100 C.ft.

From the data available for 1967-68, it could be seen that wages showed a further rising trend, particularly in Gangavati and Sindhanur taluks which are having very brisk agricultural activities. The particulars of agricultural wages in the various taluks of Raichur district for six months from July to December 1967, as provided by the State Bureau of Economics and Statistics, are as given in the table below :—

Taluk	July and August		September		October to December	
	Field Labour	Other Agrl. Labour	Field Labour	Other Agrl. Labour	Field Labour	Other Agrl. Labour
1	2	3	4	5	6	7
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
Raichur ..	2—50	2—50	2—50	2—50	2—50	2—50
Manvi ..	2—50	2—50	2—50	2—50	2—50	2—75
Sindhanur ..	2—75	3—00	2—75	3—00	2—75	3—25
Gangavati ..	3—00	3—00	3—00	3—00	3—00	3—00
Koppal ..	2—50	2—50	2—50	2—50	2—75	2—75
Yelburga ..	1—50	1—50	2—00	1—50	1—50	1—50
Kushtagi ..	1—50	1—50	1—50	1—50	1—50	1—50
Lingsugur ..	2—00	2—00	2—00	2—00	2—00	2—00
Deodurg ..	1—75	1—50	1—75	1—50	1—75	1—50

* Report on Operational Survey of Rural Manpower Utilisation Project, Kushtagi Block, 1968.

Under the Minimum Wages Act, 1948 (Central Act XI of 1948), the State Government had fixed the minimum rates of wages in respect of several categories of employment in agriculture in 1959. These rates were revised in 1968. The sub-joined statement shows the old and the revised rates of wages of the several categories :—

Class of employment	*All inclusive minimum daily rates*					
	Dry areas		*Irrigated areas*		*Perennial Garden areas*	
	1959	1968	1959	1968	1959	1968
1	2	3	4	5	6	7
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
Class A—						
1. Ploughing .. 2. Digging .. 3. Harrowing .. 4. Sowing .. 5. Inter-culturing .. 6. Irrigating or watering 7. Uprooting ..	1.25	1.85	1.50	2.20	1.75	2 55
Class B—						
1. Manuring .. 2. Transplanting .. 3. Weeding .. 4. Reaping (including harvesting, threshing and winnowing). 5. Picking in the case of cotton.	1.00	1.45	1.12	1.65	1.37	2.00
Class C—						
Cattle, sheep and goat grazing.	0.50	0.75	0.50	0.75	0.50	0.75

The monthly minimum rates fixed in 1968 for youths and children employed permanently under Class A are—Rs. 22.05 with food and clothing and Rs. 44.05 without food and clothing. The corresponding rates under Class B are—Rs. 14.70 with food and clothing and Rs. 22.05 without food and clothing and under Class C—Rs. 7.35 with food and clothing and Rs. 22.05 without food and clothing. (*See* also Chapter VIII).

Cost of living

Cost of living has been rising following the rise in prices of various commodities, especially agricultural commodities, in this district as in other parts of the country. But it is not possible to say precisely to what extent it has been rising here since no cost of living index has been prepared for Raichur. The cost of living indices are prepared only for selected centres, of which Gulbarga is one. Gulbarga being the headquarters of the Gulbarga division, to which Raichur district belongs and also by virtue of its position as a neighbouring district, we can have some idea of the trend in the cost of living index in Raichur district from the figures relating to Gulbarga. The cost of living index numbers for Gulbarga town for seven years from 1948 to 1954* reveal that it had shown a rising trend during 1948-49. The general cost of living index which stood at 173 in 1948 went up to 178 in 1949. But it dropped to 156 in 1950. After going up again to 161 in 1951, there was a fall of 14 points in 1952. The general cost of living mainly followed the cost of food. The details are given in the table below :—

Working Class Cost of Living

Index numbers for Gulbarga town—1948 to 1954

(Base : August 1943 to July 1944=100).

Year	Consumption Groups						General cost of living index
	Food	*Fuel and lighting*	*Clothing*	*Rent*	*Miscellaneous*	*Intoxicants*	
1	2	3	4	5	6	7	8
1948	177	190	130	100	203	210	173
1949	186	204	125	100	182	249	178
1950	154	183	123	100	210	293	156
1951	160	169	129	100	210	293	161
1952	138	157	129	100	200	316	147
1953	151	154	130	100	190	322	154
1954	146	157	125	100	186	322	150

The decade beginning with 1960 started with a declining trend. The index which stood at 166.6 in 1960 dropped to 161.3 in 1961, but started rising again to reach the level of 277.4 in the year 1967. The following statement gives the year-wise figures :—

*Statistical Abstract, Hyderabad State, 1964.

Gulbarga Centre 1

(Base : August 1943 to July 1944=100)

Year			Food	General
1960	..	..	169.8	166.6
1961	..	..	160.7	161.3
1962	..	..	167.2	165.4
1963	..	..	175.1	172.5
1964	..	..	216.8	204.1
1965	..	..	244.6	222.3
1966	..	..	285.7	253.0
1967	..	..	308.5	277.4

As regards the position in the year 1968, the index went up further and reached to 304 in the month of November 1968 and then dropped to 302 in December 1968. But the year 1969 started with a downward trend. The index stood at 293 in the month of January which again went down to 281 in February. In the months of April and May, it stood at 284. But in the month of July, it showed a rise of four points rising to 290 from 286 in June.

Standard of living

With the implementation of various developmental schemes under the successive Five-Year Plans, there has been considerable rise in the standard of living of the people. This is reflected in the various aspects like the food the people eat, the houses they live in, the dress they wear, things they buy at the shops and the household and other articles they use. Many of the farmers now own cars and jeeps. The number of cycles, motor cycles and scooters is on the increase. Many more people have now wrist-watches, time-pieces and radio sets. The use of toilet and washing soaps has become quite common in the villages also. More and more households have started going in for chairs and tables and such other articles of furniture. "With the steady improvement in the economic condition of many of the households, the use of small stainless steel articles for various domestic purposes is on the increase."[2] A good number of households have purchased sewing machines and mosquito curtains. As regards foods and drinks, the use of rice, sugar, milk, vegetables and fruits, processed food, tea and coffee is fast increasing.

The level of income and expenditure of a small number of people who constitute the upper class are high, whereas they are

1. Working Class Consumer Price Indices at Selected Centres—Bureau of Economics and Statistics, Government of Mysore, 1967-68.

2. Village Survey Monograph—No. 10, Yerdona Village, Gangavati taluk, Census of India, 1961.

yet low or very low in respect of the bulk of the people. It also differs from taluk to taluk; the taluks which have benefited from the Tungabhadra Project offer opportunities for earning more. There are also differences in the incomes of the urban sector and rural sector. In the absence of a comprehensive and systematic survey in the district, any attempt at assessing the standard of living of the people would be inevitably limited in scope. However, an account of the approximate income and expenditure of various classes as relating to about the end of the last decade is given below.

In the rural areas, agriculture is the main occupation of the majority of the people. The general standard of living in the rural area is anything but high and reflects the effect of generations of serfdom of many of the people to the old-time land-lords, jagirdars and inamdars and also of periodic scarcity conditions. Many of the people who actually toiled got nothing more than an occasional dole in kind and a little cash distributed in the shape of daily wages. Their position was precarious and it is only very recently that we see signs of some amount of comfort, if not prosperity, enjoyed by the tiller of the soil, thanks to successive pieces of social legislation.

Rural Upper Class

Different classes in the villages have different standards of living depending on what they earn and what they have for the future. Before the jagirs were abolished, the owners of those lands formed the upper strata of the rural population. These were the Desais, Kulkarnis and the big farmers under whom a large body of tillers worked. Now that the jagirs are abolished, some of them have taken to personal cultivation. A well-knit joint family system existed, but due to the changes in the agrarian pattern, many partitions have taken place, the land ownership being distributed among brothers and sons. Even now, some of them live under the same roof and continue to enjoy the old-time privileges. The big farmers are the village leaders whose word is held in high esteem. Some of them have large families, most of the members being engaged in agriculture and some in money-lending; they live a life that is definitely above want, and those members who have taken to money-lending, have a fairly good margin of profit entitling them to be called *sahukars*.

The total average annual income of a family in this class, derived from the lands, comes to about Rs. 4,000 to Rs. 5,000. Besides this, it has to its credit an accumulated income, both in cash and gold and silver ornaments, and also in the shape of capital amounts given as loans fetching a good interest. The standard they have in their daily life may not compare with that of the upper classes in urban areas. They are easily recognised as

influential people. Some of them continue to have the characteristics of the old-time benevolent feudal lords. The families of the upper strata have good houses with a large number of rooms, often furnished with simple furniture. The rooms are white-washed, clean and airy. Each house has a well for water and a commodious courtyard. The ladies wear also silk sarees and have gold and silver ornaments. Large amounts are spent on festivals like Yugadi and Vinayaka Chaturthi when new clothes and ornaments are bought. Expenditure on pilgrimage is also sometimes considerable. Additional expenditure is incurred on giving dinner parties on occasions like birthdays, festivals and the arrival of relatives.

Small land-holders

The next class in the rural areas comprises the cultivators who have small holdings and some of whom are mainly tenants who are now protected by law and are crop-sharers. A large number of them are indebted as can be seen from the extent of rural indebtedness in the district. Some of them incur a large expenditure on alcoholic drinks. Generally, they own two or three cows, one or two pairs of working bullocks and some of them have an unorganised poultry farm and some sheep. The standard of living of this group is not of a uniform pattern because each family seems to have its own standard. Some are parsimonious, some are extravagant and the rest balance their income and expenditure. Also, the extent of indebtedness varies from family to family. The average annual income of a family of five in this group may be estimated to be about Rs. 1,500. Most of these people live in mud houses consisting of a couple of living rooms and a kitchen. Their cattle live with them. They eat a part of what they grow. They do not spend much on fuel as they collect it from nearby shrubs and bushes. For surplus expenditure on account of social events, they run into debts, easily obtainable from the village money-lender, and consequently their margin of savings as such is negligible. The loan advances come not only from the money-lenders but also from the land-owners some of whom readily advance them in order to continue their hold on the tenants.

Landless class

The very small farmers and the landless class are the next group in the rural life of the district. The agricultural labourers do not generally possess any land or cattle. They depend entirely on the payment of cash and kind by the big farmers who engage them whenever they need their services. The labourers live in ill-ventilated and insanitary *jopadis* or huts. The family is generally small consisting of not more than five or six including children. The entire family including grown-up boys and girls goes to the field and works for a living. The occupation being seasonal, they cannot get a regular income all the year round. A few of them own small patches of land but these in turn are mortgaged for loans taken and their yield will have to be sold

to pay for the interest charges. Out of the total income they get, they have to pay for food, clothes, drinks, interest charges, repairs to houses and the like. After the advent of Independence, the Government have ushered in certain social welfare measures to better the living conditions of this class. Under the Minimum Wages Act, 1948, the minimum rates of agricultural wage have been laid down and its payment made a statutory obligation. Their lot may be said to be still hard. (*See* also under Wages and Village Survey elsewhere in this chapter).

Village Artisans

Next come the village artisans who have definite occupations which give them a living on a system of barter or cash payment. Most of these artisans live in their own houses and carry on their trade. A few of them who had some surplus money have bought lands. The village artisan-class is an occupational group and no village can afford to neglect them. It is the tradition in the villages of the district for other classes and communities to look after the welfare of this group whose services are frequently needed. Mostly, the occupations followed by these people are seasonal and therefore, in the off-season, many of them offer themselves as agricultural labourers in big farms. (*See* also Chapter VIII).

Shop-keepers and petty traders

Shop-keepers and petty traders are another important limb of the rural life. The entire retail trade is in their hands and they run their business in every village. Some of the bigger villages possess adequately equipped provision stores in which all sorts of merchandise from cloth to spices are sold. The village shop-keeper combines in himself the functions of seller, buyer and money-lender. He advances petty loans on the security of future harvests. He sells provisions on credit or for cash, depending on the type of customer he has and his credit-worthiness. His income compares favourably with that of a middle class family in the towns. The trader in the villages has a better standard of living than many of the farmers. His social contacts with his customers and his frequent visits to the towns makes him a man of importance, who has known the comforts of life. His habitation includes his shop also; he and his family dress better than the farmers. His income may be estimated to be between Rs. 2 000 and Rs. 3,000.

The above analysis gives a rough picture of the standard of living in the rural areas. Compared with accepted standards, the economic life of these rural classes cannot be called prosperous. The service co-operatives, when developed, will play a prominent part in the rural life of the district. The new agrarian laws seek to make this class own their lands and the near future may see this class of people having a standard of living that can be called decent. The ceiling on land-holdings, emergence of peasant proprietorship, implementation of various development programmes, successful functioning of village panchayats and co-operatives

and a rigorous regulation of money-lending will certainly better their lot. But the transition has to be borne with patience. The Community Development Programmes are helping them considerably and they know that a silent and effective revolution is taking place around them.

Urban Classes

The standard of living of the urban classes varies according to the avocations they follow. The urbanity and the various attractions present in the towns make the town dweller take to additional comforts within his means. The impact of education and the availability of consumer goods have given a life of planned comfort to some of the income-groups in the urban areas. The various groups in the urban area could be classed as well-to-do, the upper-middle class, the lower middle class, the wage-earning class and the poor.

Well-to-do Class

The well-to-do class in Raichur includes those who were at one time Jagirdars and Inamdars and who are now settled as businessmen, factory-owners, importers and exporters of cotton and owners of big business houses. The average annual income of a member of this group may be estimated to be between Rs. 15,000 and Rs. 25,000. This group have their own houses in towns and live a comfortable life having many of the modern amenities. (Some old-fashioned people who are not drawn towards modernity live, according to their own tastes a plain life avoiding ostentation). They eat rich food and wear silk clothes. Some of them spend generously on charities; their association with social organisations makes them spend a considerable sum by way of donations. The expenditure figure varies from household to household. During festivals, these families incur a large expenditure when they buy clothes and presents for distribution. They occasionally go on long pilgrimages or to places of tourist interest. The children of these families are well-dressed and receive higher education. The house-hold has luxury articles like good furniture, window curtains, vehicles like a car or a tonga. They have radios, gramaphones and costly ornaments. They employ domestic servants for doing odd jobs. Whenever the income rises, they set apart the savings for investments in new houses and shops. Their help is sought for social, cultural and political activities.

Upper Middle Class

The upper-middle class includes those who have lands in villages but who prefer to live in towns. They are absentee landlords and follow independent avocations like law, medicine, money-lending and business. Those who derive their livelihood from high administrative jobs may also be grouped in this class. The average annual income of this group comes to about Rs. 5,000 to Rs. 8000. Most of these people have their own houses in towns and live a life above want. They have simple furniture like cots, tables and chairs. They have also a radio or

a gramaphone, stainless steel kitchen utensils, window curtains and the like. They employ women domestic servants to help their womenfolk. This class is not parsimonious, in the matter of sartorial elegance either. The fluctuations in the cost of living have had their impact on these people also, necessitating a larger expenditure on cereals, pulses, milk, butter, etc.

The traders may be grouped as big and small depending on the individual's turn-over. The big traders may be said to be those who have incomes exceeding Rs. 300 a month. All others whose income is less than Rs. 300 may be termed as petty traders or retail traders. The big traders have their individual income ranging from about Rs. 300 to Rs. 1,000 a month. The more prosperous among them have decent standards while others just manage to balance their income with their expenditure. There are vast fluctuations in the standard of living of these traders. Most of their surplus earnings is ploughed back into their business. Many of these people have their business establishments attached to their houses and do not have to pay any rent. A few of the petty shop-keepers do their business in rented houses and have their houses elsewhere in the town.

When compared to the farmers, the standard of living of these traders is high and they enjoy various comforts. The big traders prefer to invest their savings in productive enterprises, rather than spend it on luxuries. Even most of the big traders owning big shops in Sadar Bazaar or Vallabha Patel Road in Raichur do not possess cars. They use the common cycle rickshaw or tonga. But their ladies wear good sarees and costly ornaments. The small traders on the other hand are leading a life better than that of a general middle class family. The petty traders, of course, are most of the time on a subsistence level.

Lower Middle Class

The lower-middle class in the urban areas are the worst hit as the cost of living index has gone up enormously. Persons belonging to this class are hard put to make both ends meet. The rising cost of living and the increase in house rents have made the life of the lower middle class really hard. The average annual income of a person in this group may be estimated to be about Rs. 2,000 to Rs. 3,000; this group comprises, in the main, the white-collared class working in offices or other private concerns and persons doing other odd jobs like cashiers bill collectors and the like. They do not possess houses of their own but live in rented buildings, the rents in some cases taking away nearly one-fourth of the net income. The balance is spent on food articles, clothes and education for children. They often run into debts, whenever an unforeseen circumstance occurs. This indebtedness hampers their efforts to better their standard of living. It is difficult for this group to save any little sum for their future except perhaps their insurance and provident fund. Loans are

obtained on these savings to meet the additional cost of social events like marriages. There is no set standard as such noticeable among this group. Each family follows its own standard. Some of them at least can fall back on a little agricultural land or ancestral property. It is generally the practice with these people to try as far as possible to get additional sources of revenue wherever it is possible to do so. They undertake part-time jobs in their spare hours to supplement their income. Most of these families are finding it very difficult to send their children to colleges and are forced to stop their education at the secondary stage. The middle class house-rent in Raichur has increased tremendously and sub-letting is also resorted to. It is very difficult to find adequate shelter except where the Government have provided living quarters.

Skilled Labour

The skilled labour in the district, as elsewhere, is represented by the carpenters, blacksmiths, goldsmiths, tailors, etc. The monthly income of persons in this group varies from Rs. 100 to Rs. 200 during the busy season. Generally, the women of this group do not go out for work. They confine themselves to their houses. The standard of living of these people varies from group to group and the income also varies from season to season. During marriage seasons, the goldsmith gets increased business while in the lean months he has to depend on his savings. During the pre-monsoon days when there is brisk house-building work, the blacksmiths and carpenters get busy. So also is the case with tailors who make good money during the festival occasions. Whenever these people get more money, they spend it on buying clothes and ornaments. They cannot spend on luxuries and only occasionally they see a cinema. (*See* also Chapter VIII).

Unskilled Labour

The unskilled labour, constituting mostly sweated labour, is found all over the district. These are the manual labourers called coolies or hamals. They have no assured income or continuous occupation. The sporadic nature of their work offers them little comfort. They earn Re. 1 to Rs. 2 a day and save very little for the lean months. Both the male and female members of this group find jobs and the average monthly income will be somewhere between Rs. 75 and Rs. 100. The budget of this group is precariously balanced and a good slice goes for food and clothing. The drinking habit, which is largely prevalent in the district, is eating into the vitals of this group and the standard of living is very poor. These people live in slums under very insanitary conditions and it is no wonder that the general standard of health among them is poor. A particular feature noticed in this group is the total absence of any expenditure on education.

It may be said that the poor class are those whose total annual income is less than Rs. 800. This class is found all over and comprises mainly wage-earning labourers and the like.

Most of the income of this group goes for food and clothing and there is very little left for other necessities. The lot of persons belonging to this class is very hard.

Industrial Labour

The standard of living in the industrial centres of Raichur district is somewhat different. The industrial centres in the district are the Hutti Gold Mining area, Raichur city, Munirabad, Koppal and a few other bigger towns where there are factories and establishments. The wage-earner in the industrial sector earns more than his counterpart in other fields. He gets a daily wage ranging from Rs. 2 to Rs. 5 and in some cases bonus and other benefits. The Hutti Gold Mining Company have provided several amenities to industrial workers, like hospital, recreation club and co-operative housing. The housing facility on just a nominal rent is a great boon to the labourers who thus find it easy to save a substantial sum from out of their monthly earnings. The accommodation provided is clean and tidy. In contrast to other labourers who live in slums, the labourer in Hutti lives in airy and clean houses. It is a well recognised maxim that the standard of living is raised if one lives in a comfortable abode which gives him enough rest and opportunity for recuperation. The recreation facilities provided makes him take a better view of life. Free medical aid, provident fund facilities and the payment of bonus have all raised his standard of living. Even so, he finds it difficult to save because of rising prices.

Those who are not addicted to drinking, have a better standard of living. From field studies it is estimated that a family which earns Rs. 100 to Rs. 150 a month, spends nearly 70 per cent on food and fuel. About ten per cent is earmarked for interest on loans and another ten per cent is spent on clothing. These people do not generally go on pilgrimages or on tour. The income of the male member is supplemented by the earnings of the women-folk and this adds to their standard of living. The statutory provident fund facility in vogue in the industrial sphere has been a boon to the workers. This has compelled them to save a part of their income for future needs. The Janata Policy Scheme of the Life Insurance Corporation, where small policies are accepted without medical examination, is yet another security measure. (Please *see* also Chapters V and XVII).

Many of the oil, ginning and other mills in Raichur, Koppal, etc., have not provided housing facilities to their workmen. Bonus payments are also scarce. It is seen that labourers employed by them live in crowded areas and their hard life drives them to the drinking habit which draws a good portion of their income. There has been no organised attempt so far to insure their lives. The wages paid to these people are low when compared to other industrial enterprises. These people often run into debts, pledging their silver ornaments or household utensils.

Village Survey

The survey[1] conducted in the Yerdona village of Gangavati taluk throws some light on the income and expenditure patterns of the people in a rural area of the district which is benefited by irrigation. According to this survey, about 47.5 per cent of the households came under the income group of Rs. 101 and above per month and 26.7 per cent of the households came under the income group of Rs. 76 to Rs. 100. Households under the income group of Rs. 51 to Rs. 75 formed about 20.4 per cent. The distribution of households by occupation and income in that village is shown in the following table :—

Principal occupation	Total No. of households	Income Group					Total No. of members in households mentioned in col. 2
		Less than Rs. 25 per month	Rs. 26 to 50 per month	Rs. 51 to 75 per month	Rs. 76 to 100 per month	Rs. 100+ per month	
1	2	3	4	5	6	7	8
Cultivation of owned lands ..	229	1	7	42	54	125	1,296
Cultivation of lands taken on lease ..	15	..	..	3	7	5	75
Agricultural labour ..	19	..	5	8	3	3	79
Household Industry ..	10	..	1	2	6	1	46
Others[2] ..	30	..	2	7	11	10	132
Total ..	303	1	15	62	81	144	1,628

"According to these figures, it could be said that only 47.5 per cent of the total number of households are well-off while the economic condition of 26.7 per cent of households can be considered as slightly below the optimum standard of living and 25.8 per cent of households which come under the other low income groups have to be classed as very poor" observes the survey. Further, it says : "Among the cultivators of owned lands, 125 households out of 229 in that category (54.6 per cent come under the income

1. Village Survey Monographs, No. 10, Yerdona Village of Gangavati taluk, Census of India, 1961, Volume XI, Mysore.

2. 'Others' include the number of households as follows :—

Trade	..	3
Service	..	20
Hotel-keeping	..	4
Remittance receivers		3

group of Rs. 101 and above per month, and 54 households or 23.5 per cent come under the next lower income group of Rs. 76—100. Among the tenants there are 5 households (33.3 per cent) and 7 households (46.6 per cent) respectively in the above two higher income groups. Thus, in all, 130 households (53.2 per cent) of cultivators out of 244 households in the village are comparatively well-off. This comparatively good picture is mainly due to the introduction of wet cultivation in the village after the advent of canal irrigation. The income in these households has more than doubled since the change-over to wet cultivation...... Thus, viewed from any angle, it is clear that the class of cultivators in general have been steadily marching forward towards the goal of economic prosperity and this is a feature which indeed augurs well for the future."

In so far as the agricultural labourers are concerned, only about 15.8 per cent of the households came under the income range of Rs. 101 and above per month. The average annual income per household of agricultural labourers worked out to Rs. 857. According to the survey, it could be said that about two-thirds of the households of agricultural labourers still continued to be poor and they had not been able to share the economic prosperity of the cultivating class in any effective way. The only consolation for them was that they were able to get work throughout the year. "A contented labour which is a great force to be reckoned with would bring more prosperity to the villagers and as such it would be desirable to devise suitable methods which would enable them to earn more." The survey also revealed that those engaged in household industry were in no better position than agricultural labourers. The average annual income per household among them worked out to Rs. 792, *i.e.*, less than that of agricultural labourers.

Expenditure pattern

The expenditure on food among the households ranged from about 72.42 per cent to 76.14 per cent of the total expenditure. The percentage was more among the lower income groups than in the higher income groups, the maximum being in the case of agricultural labourers. The percentage of expenditure on clothing ranged from 13.79 per cent to 16.12 per cent and that on tobacco from 2.56 per cent to 4.01 per cent. The expenditure on education is very low. The maximum expenditure on this item was incurred by the cultivators of owned lands and by those coming under 'others'; the percentage expenditure to total expenditure was just 0.78 per cent. The low incidence of expenditure on primary education is primarily due to the fact that it is given free by the State to all. The lower income groups spend practically nothing on education. An idea of the average monthly expenditure per household in the five categories of occupations as disclosed by the survey can be had from the following table :—

Average monthly expenditure per household by occupations

(In Rupees and Paise)

Items of expenditure	Cultivation of owned lands		Cultivation of lands taken on lease		Agricultural Labour		Household Industry		Others	
	Expenditure per household	Percentage to total expenditure	Expenditure per household	Percentage to total expenditure	Expenditure per household	Percentage to total expenditure	Expenditure per household	Percentage to total expenditure	Expenditure per household	Percentage to total expenditure
FOOD:										
Cereals	27.55	21.44	23.38	23.18	11.31	15.09	13.34	16.72	17.72	18.45
Non-Cereals	65.51	50.98	51.64	51.18	45.78	61.05	45.39	56.88	52.93	55.11
Tobacco	5.16	4.01	2.59	2.56	2.22	2 96	2.61	3.26	3.29	3.43
Clothing	20.68	16.10	15.05	14.91	10.34	13.79	12.86	16.12	14.40	14.99
Fuel and Lighting	2.85	2.21	2.62	2 59	1.94	2.59	1.92	2.41	2.30	2.39
Education	1.01	0 78	0.42	0.41	0.02	0.03	0.13	0.16	0.75	0.78
Others	5.77	4.48	5.22	5.17	3.37	4.49	3.55	4.45	4.66	4.85

Employment

The employment opportunities in the district have increased along with the developmental activities in the various fields. But at the same time, the problem of unemployment is also growing. The total number of persons on the Live Register of Employment Exchange, Raichur, had increased by more than twice the number between 1961 and 1968. It had gone up from 1,561 in 1961 to 3,638 in 1968. Most of the job-seekers are in the age-group of 20-25 years. The year-wise particulars relating to the number of persons on the Live Register of the Employment Exchange are as given below :—

Year (as at the end of March)			*Number of persons on the Live Register*		*Total*
			Men	*Women*	
1961	..	..	1,525	36	1,561
1962	..	..	2,393	46	2,439
1963	..	..	2,620	117	2,737
1964	..	..	3,075	94	3,169
1965	..	..	2,936	132	3,068
1966	..	..	3,005	194	3,199
1967	..	..	3,714	206	3,920
1968	..	..	3,392	246	3,638

A large majority of these persons come under the category of "workers not classifiable by occupation." In 1968, their number was 2,879, whereas the number of persons classified under "professional, technical and related workers" was only 279. As regards the qualification, most of them were matriculates. But the number of vacancies notified has not increased in the same proportion. It was 1,112 in the year 1961 and 2,334 in 1962, but it declined to 1,349 in 1963 and it stood only at 1,112 in 1968. The year-wise particulars are as given below :—

Year (as in March)			*Total No. of vacancies notified.*
1961	..	..	1,112
1962	..	..	2,334
1963	..	..	1,349
1964	..	..	1,309
1965	..	..	770
1966	..	..	1,452
1967	..	..	1,102
1968	..	..	1,112

About 5,500 persons could secure jobs through the Employment Exchange during the period of seven years from 1961-62 to 1967-68. The year-wise particulars are as given below :—

1961-62	.. ..	797
1962-63	.. ..	937
1963-64	.. ..	1,133
1964-65	.. ..	591
1965-66	.. ..	821
1966-67	.. ..	549
1967-68	.. ..	703
	Total ..	5,501

As per the report of the District Employment Officer relating to the changes in the conditions of the employment market of Raichur district for the year 1967-68, the total estimated employment in both public and private sectors recorded an increase of 728 persons from 19,590 at the end of March 1967 to 20,318 at the end of March 1968. The estimated employment in the public sector had increased from 12,992 at the end of March 1967 to 13,029 at the end of March 1968 and in the private sector, it had increased from 6,598 to 7,289.

As per the Annual Area Employment Market Report for the year ending with 31st March, 1969, the increase in employment during the year 1968-69 was 860 over that of the previous year, *i.e.*, it went up from 20,318 to 21,178. The increase was mainly in agriculture, mining and quarrying, manufacturing and trade and commerce. The employment in private sector showed proportionately a more increasing trend than the public sector during the year. It went up to 7,815 from 7,289, while in the public sector it increased by only 334 from 13,029 to 13,363.

The proportion of women who are employed to the total number of persons employed is low in the district. Out of 20,318 persons employed in 1967-68, only 3,222 and out of 21,178 employed in 1968-69, only 2,956 were women. The proportion actually decreased from about 15.9 per cent in 1967-68 to about 14 per cent in the year 1968-69. Stenographers, typists, midwives, compounders, vaccinators, mechanics, etc., were in short supply in the district.

As regards the conditions in the rural areas, the employment is mainly seasonal. The opportunities for employment are more in the ayacut area, and the demand is increasing. "With the provision of infrastructure facilities, the intensive development of

the ayacut area will be rapid over the next five years. This activity would naturally call for a large input in terms of labour. Irrigated conditions of agriculture require a greater degree of labour input than dry conditions. At present, in the ayacut area in both the districts,[1] there is an acute shortage of labour, which has not merely affected agricultural activity but has also had its effect on the normal roads construction programmes......

"In irrigated areas, a norm which is commonly adopted is that for every four acres brought under irrigation, one person would obtain additional employment."[2] According to this norm, it is estimated that the intensive development of the area would provide employment for an additional 1,55,470 persons in the Tungabhadra Project Area (*i.e.*, Raichur and Bellary districts).

But the picture is different in the case of non-irrigated areas, from where thousands of workers migrate to other places seeking employment during the off-season. According to the report on operational survey, 1968, relating to Rural Manpower Utilisation Project in Kushtagi Block, about 11,000 workers migrated from the Block during the off-season of 1964-65 and they were away for about four months doing agricultural work elsewhere in the district.

Community Development

A very important place has been accorded to the Community Development Programme in our successive Five Year Plans. This programme seeks to achieve an all-round development of rural India. It is a movement which aims at improving the standard of living of the rural people through self-help and mutual co-operation. A new change in their outlook is sought to be brought about through extension education. They are assisted in identifying their problems and also in solving them. While creating a new awareness in them, the ways for fulfilment of their requirements are also shown. They are induced to associate themselves with various schemes of development for bettering their lot. The success of this programme mainly depends on the participation and co-operation of the people. "When the first set of community projects were taken up nearly nine years ago, community development was described as the method, and rural extension as the agency, through which the transformation of the social and economic life of villages was to be initiated...... One of the principal tasks in the Third Plan will be to ensure the growth and working of Panchayati Raj institutions so as to enable each area to realise its maximum development potential on

1. Raichur and Bellary.

2. An Outline Project Report on the Investment for Infrastructure in the Tungabhadra Project Ayacut, Directorate of Evaluation and Manpower, Bangalore, 1968.

the basis of local manpower and other resources, co-operative self-help and community effort, and effective use of the available resources and personnel"*. Various schemes for the development of agriculture, animal husbandry, co-operation, rural industries, health and sanitation, rural communication, education and social education, were prepared and implemented under the Community Development Programme. In recent years, more emphasis has been laid on schemes meant for increased agricultural production. The programme was started in the Raichur district on 2nd October 1912 with the inauguration of the Tungabhadra Community Project at Munirabad. The next area to be covered under the National Extension Service was Sindhanur taluk followed by Kushtagi, where the Blocks were inaugurated on 6th May 1956 and 2nd October 1957, respectively. Then followed the other taluks and the whole district has been covered by the scheme.

The period of operation of the Tungabhadra Community Project, which covered 136 villages of the Koppal and Gangavati taluks, was for five years, which was over on 1st April 1957 and thereafter it was split up into two Post-Intensive Blocks, *viz.*, (i) Koppal Post-Intensive Block covering 55 villages and (ii) Gangavati Post-Intensive Block covering 81 villages. To cover the remaining 113 villages of the Koppal Block, a full N.E.S. Block was established and a half N.E.S. Block was sanctioned for the remaining 75 villages of the Gangavati taluk.

Tungabhadra Community Project

The Tungabhadra Community Project was intended to bring about co-ordinated development of the Tungabhadra ayacut area. In the ayacut area, the Block agency acted as the extension agency and assisted in bringing the area under irrigation and efforts were directed towards increasing agricultural production. In the period from 1955 to 1957, 830 demonstration and seed multiplication plots were established. About 7,000 maunds of improved seeds and 32,000 maunds of fertilisers were distributed. Efforts were also made to improve cattle wealth in the Block area. Six breeding bulls were purchased and stationed at various places. A cattle-*cum*-sheep breeding farm was established at Munirabad. Poultry farming was encouraged and a poultry farm was functioning at Allanagar.

Local Development Works

Several local development works were taken up and about 30 drinking water wells were completed in Koppal taluk. A hospital building and a maternity ward were constructed and handed over to the Medical Department. Mid-wifery centres at Hittanhal and Hulgi, 42 school buildings and two panchayat ghars at Muddahalli and Hulgi were constructed. Street lamps were provided for several of the villages.

*Third Five-Year Plan, Government of India.

Co-operation

In the sphere of co-operation, a special feature of this Block was the working of co-operative societies in the field of cottage industry. Among them, mention may be made of two Cotton Handloom Weavers' Co-operative Societies—one at Bhagyanagar and another at Kinhal, a Silk Weavers' Co-operative Society at Hoskanakapur, two Wool Weavers' Co-operative Societies at Gondbal and Moranhalli. Besides, a Tanners' Co-operative Society and an Industrial Co-operative Society at Koppal, the Chitragar Industrial Co-operative Society at Kinhal, Jute Industrial Co-operative Society at Hosahalli and Bamboo Industrial Co-operative Society at Guladhalli were also encouraged. Loans were advanced towards the share capital of some of these societies from Community Project funds. Forty-eight agricultural credit societies, two rural banks, 21 grain banks and 28 rural uplift societies were organised in the Block.

Besides, there were three Industrial Training Centres, the most important of them being the Koppal Rural Arts and Crafts Industrial Centre, which trained about 300 candidates in several crafts like cotton and wool-weaving, dyeing and printing, carpentry, blacksmithy, tanning and leather-work. A Tailoring and Embroidery Training Centre was also established at Bhagyanagar village for training of women in tailoring and embroidery. An amount of about Rs. 32,000 was distributed from the Community Project funds among 164 persons for development of industries.

Social Education

In the field of social education, 11 Libraries and 40 Bhajan Mandals, 15 Youth Clubs, several Community Recreation Centres and 12 Adult Education Centres were set up in this Block. Five Village Leaders' Training Camps were successfully organised where improved agricultural methods were demonstrated. Film shows were arranged for imparting knowledge to the villagers on different subjects and there was a van and necessary equipment for the purpose. A batch of progressive cultivators were taken on a study tour in the Visvesvaraya Canal area in Mandya district. Sixteen Mahila Mandals were established. 'Bal Shalas' were also organised in several centres, which arranged sports and other recreation programmes for children.

Augmentation of agricultural labour

With the large individual holdings and lack of sufficient labour force in the ayacut area, it became necessary to make efforts to augment the labour potential of the area. A scheme was taken up to bring and settle 500 landless agricultural labour families from other parts of the State, so that they could assist in cultivation of lands in accordance with improved agricultural practices. To make them have a foot-hold in their new environment, the new labour families were given one acre of wet land or two acres of dry land each and they were also advanced Rs. 100 as development *taccavi* on their lands ; a house plot was allotted free to each

family and financial assistance was also given for house-building and for purchasing agricultural implements and bullocks.

Rehabilitation

An important item of work entrusted to the development officers of the Tungabhadra Project was the rehabilitation of the people of the villages submerged in the reservoir. Out of 40 such villages, 10 villages were completely submerged and the remaining thirty were partially affected. The people from the completely submerged villages were induced to shift to the ayacut area where they naturally had better prospects. The compensation for land and houses which were submerged was arranged to be paid through co-operative societies, to be utilised by the awardees for purchase of new lands and for construction of new houses. A co-operative stores was also established to supply the building materials such as cement, zinc-sheets, iron-rods, wooden materials, bricks and bamboos at fair rates to the resettlers.

Twenty-one rehabilitation centres were established on the foreshore for the resettlement of the partially submerged villages. Plans were prepared for construction of houses and drinking water wells, internal roads, school buildings, community halls and religious buildings. Five acres of Government land were given to each family free of cost. Land was acquired from surplus holders and allotted to the resettlers who wanted more land on payment of cost. Grants to the deserving families and *taccavi* for improvement of lands and house-building loans were also given. In addition to these 21 centres on the foreshore, 10 other centres were opened in the ayacut area which were also provided with all the above-said amenities. Thus, in all, 31 new villages sprang up and 18,000 resettlers were rehabilitated. The cost borne by Government on this account was about Rs. 37,85,000.

The entire Community Development Programme was re-phased and a new revised pattern was brought into force from 1st April 1958. All Blocks which were still in the N.E.S. stage were converted into Development Blocks Stage I, with a schematic budget provision of Rs. 12 lakhs for each Block for a period of five years, while the existing Post-Intensive Phase Blocks were treated as Development Blocks Stage II, with a schematic budget provision of rupees five lakhs for each such Block.

There were, in all, 15½ units of Blocks in Raichur district as on 31st of March 1969. Out of them seven units were Stage I Blocks, five and a half were Stage II Blocks and three units were Post-stage II Blocks, located as follows :—

Taluk		*Stage I*	*Stage II*	*Post-stage II*
		No. of Units	*No. of Units*	*No. of Units*
Lingsugur	..	2	..	..
Kush'agi	..	1	1	..
Raichur	..	2	..	..
Manvi	..	2	..	..
Yelburga	..	..	2	..
Deodurg	..	..	1	..
Koppal	..	..	1	1
Gangavati	..	..	..	1
Sindhanur	..	..	..	1

An amount of Rs. 9,13,591 was spent under various heads of development in the district from the Block funds in the year 1963-64, out of which a sum of Rs. 1,82,554 was for agriculture and animal husbandry and Rs. 1,57,156 for health and sanitation, the amount of expenditure for communications and rural arts and crafts being Rs. 92,935 and Rs. 50,607 respectively. An amount of Rs. 3,05,072 was spent under Q. loans and advances. The total expenditure during the next year, *i.e.*, 1964-65, was a little less, *i.e.*, Rs. 8,20,605, out of which agriculture and animal husbandry claimed a share of Rs. 1,90,087 and health and sanitation Rs. 1,30,448 ; under Q. loans and advances, an amount of Rs. 2,94,786 was spent. The expenditure incurred on social education and communication was Rs. 42,059 and Rs. 55,259 respectively.

During the next year, *i.e.*, 1965-66, there was a large financial outlay and the total expenditure of the year stood at Rs. 12,59,442 out of which agriculture and animal husbandry claimed the major share of Rs. 4,08,502. An amount of Rs. 2,86,947 was spent under Q. loans and advances and Rs. 2,60,452 were spent on health and sanitation. The total expenditure for the year 1966-67 was only Rs. 7,75,222. The maximum amount spent was for agriculture and animal husbandry (Rs. 2,12,355), while health and sanitation and Q. loans and advances claimed Rs. 1,93,295 and Rs. 1,12,615 respectively. The amounts expended under other heads, namely, education, social education, communications, rural arts and crafts and housing were Rs. 42,147. Rs. 26,274, Rs. 54,190, Rs. 64,286, Rs. 30,443 and Rs. 39,613 respectively. The expenditure during the next year, *i.e.*, 1967-68 was further reduced and it was only Rs. 5,15,141, out of which Rs. 1,09,060 were spent for agriculture and animal husbandry and Rs. 1,53,326 on health and sanitation. The details of expenditure under various heads of development for the year 1965-66 and 1967-68 are given in the tables appended at the end of the chapter. The overall physical progress achieved

under the several heads of development has been dealt with in the various chapters and here the working of one of the Blocks, *viz*., Lingsugur, is very briefly indicated below by way of illustration.

Lingsugur Block

Lingsugur is a double-unit Block. The first unit was inaugurated on 20th October 1960 and it entered the first stage after one year, *i.e.*, on 20th October 1961. The second unit commenced working on 10th April 1961 and entered the first stage on 2nd April 1962. About 550 irrigation wells were sanctioned out of which 350 were completed during the period from 1961-62 to 1967-68. Good progress was made in the field of co-operation and there were about 120 co-operative societies functioning in the taluk. While in the year 1961-62 a total quantity of only 21 quintals of improved seeds was distributed in the Block, it went up to 528 quintals in 1963-64 and 1,150 quintals in 1966-67; in 1967-68, however, it was 588 quintals. There has been a considerable increase in the distribution of fertilisers in the Block. While the total quantity of fertilisers distributed was only 103 quintals in 1961-62, it had increased to about 3,116 quintals in 1967-68. About 300 iron ploughs were distributed in seven years from 1961-62 to 1966-67. Establishment of two primary health units and a veterinary dispensary was an important achievement under health and sanitation. About 45 youth clubs, 6 *mahila mandals* and 24 rural libraries were organised and about 30 community radio sets were installed during the period. Twenty literacy classes were started and about 600 adults were made literate. About 85 class rooms were built in 40 villages of the Block. About 40 sewing machines were distributed under the rural arts and crafts programme. Thirteen roads were undertaken for construction and a length of about 32 miles was completed. Sinking of 102 drinking water wells was taken up, out of which 43 were completed and the work relating to the rest was in progress.

As stated in earlier chapters, the Tungabhadra Project has imparted a new measure of diversity to the economy of the district. The advent of irrigation on a large-scale and introduction of new agricultural practices prepared the ground for a green revolution. The good supply of power has brought to light immense possibilities of economic growth. Opportunities for the establishment of agriculture-based industries are increasing. A considerable scope has been created for the development of industries—both big and small. As the investment for infrastructure has gone up, much progress has been achieved in the field of transport and communications. Several new facilities have been made available to the people to develop their skill and knowledge.

Doubtless, the area has been backward for a long time, but there has been a new awareness among the people whose sturdy

commonsense can be depended upon in any future scheme of economic betterment. A willingness to march forward, and in that process, to join hands with one another in a spirit of co-operation, has been abundantly perceptible in recent years, among the people of the district. Old traditions and beliefs die hard, as much in Raichur district as elsewhere. What is heartening is that earnest efforts at amelioration on the part of the administration are reciprocated equally sincerely by the people. We can foresee a time in the near future when the huge potential of Raichur district will be harnessed for the economic, social and cultural betterment of its people, which, in its turn, would contribute to a more prosperous future for the whole of the State.

Statement showing the expenditure incurred out of the Block Funds under various Heads of Development in the Community Development Blocks of Raichur District during 1965-66.

Sl. No.	Name of Block	Agriculture and Animal Husbandry	Irrigation	Health and Sanitation	Education	Social Education	Communication	Rural Arts and Crafts	Housing	Q. Loans and Advances	Total
1	2	3	4	5	6	7	8	9	10	11	12
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1.	Raichur ..	14,690.71	14,373.48	21,335.54	2,517.85	2,606.84	..	15,387.90	..	71,850.00	1,42,762.32
2.	Gunjahalli ..	24,521.89	15,905.52	24,268.92	999.12	2,248.21	.	3,617.63	..	44,950.00	1,10,511.29
3.	Manvi ..	30,301.00	..	8,417.89	..	10,854.56	1,822.00	..	1,500.00	16,000.00	68,895.44
4.	Kavital ..	26,112.00	..	20,042.00	1,231.00	8,131.00	..	6,825.00	6,825.00	48,000.00	1,17,106.00
5.	Deodurg ..	975.00	363.00	1,692.00	.	..	850.00	..	..	1,400.00	5,280.00
6.	Lingsugur-I ..	68,760.63	..	32,633.12	1,637.31	5,077.94	5,077.94	7,425.00	..	18,762.29	2,09,374.23
7.	Sindhanur ..	..	..	..	..	283.00	..	1,088.00	..	2,200.00	3,571.00
8.	Kushtagi-I ..	15,473.00	..	3,199.00	3,000.00	3,472.00	3,004.00	456.00	..	6,470.00	35,074.00
9.	Kushtagi-II ..	22,044.00	..	10,313.00	5,000.00	5,415.00	7,986.00	.	7,515.00	3,943.00	62,216.00
10.	Koppal-I & II	28,611.75	9,717.10	2,950.00	..	6,385.73	..	3,772.60	..	850.00	52,287.16
11.	Gangavati ..	5,785.38	..	7,000.00	..	2,500.00	2,000.00	1,499.56	..	7,000.00	25,784.94
12.	Yelburga ..	94,860.00	..	66,303.56	..	4,661.00	..	..	33,504.73	..	1,99,329.29
13.	Bevoor ..	44,448.00	..	38,647.00	..	2,478.00	..	54.00	5,890.00	53,600.00	1,45,117.00
14.	Lingsugur-II	31,919.00	..	23,650.00	491.25	120.76	4,077.94	3,892.78	..	11,922.20	76,074.02
	Total ..	4,08,502.36	40,359.10	2,60,452.03	14,876.53	54,234.04	24,817.88	44,018.47	55,234.33	2,86,947.58	12,59,442.71

Statement showing the expenditure incurred from the Block Funds under various Heads of Development in the Community Development Blocks of Raichur District during 1967-68.

Sl. No.	Name of Block	Agriculture and Animal Husbandry	Irrigation	Health and Sanitation	Education	Social Education	Communication	Rural Arts and Crafts	Housing	Q. Loans and Advances	Total
1	2	3	4	5	6	7	8	9	10	11	12
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1.	Raichur ..	14,642.00	15,000.00	13,000.00	5,000.00	4,330.12	..	2,000.00	3,000.00	2,500.00	59,472.12
2.	Gunjahalli ..	8,893.93	6,160.24	16,708.95	..	1,681.65	1,386.39	..	3,000.00	500.00	38,421.16
3.	Manvi ..	12,994.00	..	6,599.65	3,000.00	2,713.37	7,985.02	2,107.72	22,000.00	..	52,400.55
4.	Kavital ..	9,258.00	..	13,847.00	..	500.00	7,175.00	1,495.00	..	4,600.00	36,875.00
5.	Deodurg .	1,231.00	..	2,672.00	.	79.00	2,617.00	750.00	..	6,500.00	13,849.00
6.	Lingsugur-I ..	5,504.92	..	15,210.00	.	..	3,973.00	800.00	..	..	25,487.92
7.	Sindhanur ..	..	..	3,373.00	..	2,187.00	9,418.60	500.00	..	..	15,478.00
8.	Kushtagi-I ..	8,303.00	.	14,745.00	1,220.00	2,997.00	2,558.00	..	..	500.00	30,323.00
9.	Kushtagi-II ..	7,043.00	..	4,309.00	3,000.00	4,917.00	10,432.00	834.00	..	..	30,535.00
10.	Koppal-I & II	3,539.14	5,480.00	..	3,000.00	1,767.88	..	3,699.20	..	..	17,486.22
11.	Gangavati ..	4,345.87	..	2,722.44	..	3,000.00	2,505.93	.	..	1,700.00	14,274.24
12.	Yelburga ..	12,493.06	..	19,480.70	24,722.60	5,325.15	6,938.00	..	13,000.00	..	81,959.51
13.	Bevoor ..	7,495.81	..	17,472.00	4,632.00	1,705.00	2,250.00	997.00	..	16,950.00	51,501.00
14.	Lingsugur-II	13,876.81	..	23,187.04	910.84	1,055.00	2,809.00	2,250.00	..	2,930.00	47,078.69
	Total ..	1,09,660.54	26,640.24	1,53,326.78	45,485.44	32,258.17	55,107.32	15,432.91	41,000.00	36,230.00	5,15,141.41

CHAPTER X

GENERAL ADMINISTRATION

GENERAL administration, insofar as a district is concerned, only means district administration. District administration may be defined as the management of public affairs within a territory demarcated for the purpose. The district, in some shape or the other, has always been an important administrative unit in India, though, in the past, it was being variously called as *Vishaya*, *Kampana*, *Nadu*, *Seeme*, *Sarkar* and so on at different times by different ruling dynasties. Even the code of Manu describes the village as, more or less, a self-contained republic with a headman, and that a number of such villages formed a bigger administrative unit which was placed under the charge of an officer. This position has not varied greatly over the centuries.

Early period

As already stated elsewhere, the region, which now constitutes the Raichur district, formed a part of the dominions of the great Mauryan king Ashoka and was ruled by an *Ayaputa* or prince of the royal family, who was the viceroy, with the assistance of *Dharmamatras* and *Mahamatras*. The Satavahanas held sway over Karnataka between 150 B.C. and 2nd Century A.D., and during their rule, the administration of the country was very smooth due to a system of local administration in which local bodies functioned with remarkable efficiency. The king's officers had only supervisory duties. The Kadambas, who later ruled over this area, divided the territory into *Nadus*, each *Nadu* being sub-divided into groups of villages ostensibly to make the collection of revenue easy. There was a marked decentralisation of administration since the *Mahajanas*, who were in charge of village administration, looked after the affairs of the villages under their charge without any interference from the provincial or imperial officers, except for an overall supervision.

Under the Chalukyas of Badami, most of these features of administration continued. The *Mahajanas* (Assembly of Elders) performed all the administrative functions at the lower level. They had considerable autonomy even in adjudication of civil and criminal cases pertaining to the area of their jurisdiction. The Rashtrakutas divided their empire into provinces called

Rashtras, the administration of which was looked after by Provincial Governors. A smaller territory than *Rashtra* was called a *Vishaya* (*i.e.*, a district), and lower than the *Vishaya* was a *Bhukti* (*nadu*) made up of several rural units. At the lowest level was the *Grama*, forming a primary village unit. The Provincial Governor was called *Rashtrapati* or *Mahamandaleshwara*. Next to him was *Mandalika* and next below was *Vishayapati*, the head of a *Vishaya*, followed by *Bhogapati*, the head of a *Bhukti*. The latter was also called *Nadagavunda*. The headman of the village was called *Gavunda*. The villages were administered by the *Mahajanas*. The *Gavunda* or the village headman held a key-position among the village officials. Next to him was the *Senabova* or the village accountant. The *Urodeya*, who was the elective and executive head of the village assembly, played an important role in the life of the village. Under the Chalukyas of Kalyana, the Provincial Governors were almost invariably members of the royal household or princes. Local administration had elaborate ramifications. There were *Kampanas* or districts, of a smaller denomination. These smaller divisions were governed by *Prabhus*, *Nadgavundas* and *Dandanayakas*. The administration of justice was carried on by the *Mahajanas* and the village headmen in conformity with the *Dharma-Shastras* and local customs.

During Hoysala period

During the Hoysala period, the provinces were divided into *Nadus*. The officer under the direct charge of the Governor (*Mandalika*) was the *Heggade*, also called as *Heggade-Karana*, *Rajadhyakshara-Karana*, etc. The official hierarchy under him comprised *Nadagowda*, *Naduprabhu*, *Nadasenabova* and *Urodeya*. During this period, the administrative charges appear to have been reorganised and modified to suit new conditions. The Vijayanagar kings did not much vary this administrative system. The kingdom was divided into several *Mandalas* and a number of *Urus* or villages formed a *Seeme*, a number of *Seemes* formed a *Rajya* or *Maharajya* and several *Rajyas* constituted a *Mandala*.

Under the Bahmanis, the kingdom was divided into four divisions called *Tarafs*, each under the charge of a *Tarafdar*, who was supreme in his jurisdiction. He collected the revenue, raised and commanded the army and made all appointments, both civil and military, in his province. Each *Taraf* was sub-divided into *Sarkars* or districts which, in turn, were further sub-divided into *Paraganas*. The village was the smallest unit of administration and a number of villages formed a *Paragana*. The Adil Shahi rulers also divided their kingdom into *Sarkars* and *Paraganas*, the total number of their *Sarkars* being about sixteen.

During Nizams' rule

During the rule of the early Nizams, there was no real administration in the modern sense. A good deal of land was given away in the form of grants, jagirs and inams to nobles and

others who promised to perform certain services, especially the maintenance of troops for use by the ruler. The land given to the nobles was known as *paigah* and those gifted to others for meritorious services rendered to Government were called jagirs. The ruler himself privately owned large extents of crown land called *Sarf-e-khas*. These three kinds of lands constituted about one-third of the whole area of the State. The Government land was called *Khalsa* or *Diwani* lands. The two taluks of Koppal and Yelburga in Raichur district were entirely the jagir of Nawab Salar Jung; similarly there were also a large number of small jagirs and other kinds of alienated villages in the other taluks of the district.

Between 1853 and 1857 A.D., the district of Raichur was administered by the British Resident in Hyderabad since the entire Raichur doab, along with two other districts, had been ceded to the British by the Nizam in lieu of arrears of payment for the contingent troops. After the restoration of the Raichur doab to the Nizam, he introduced administrative reforms at the district-level and made some territorial adjustments in the area. In 1867, the entire State was divided into five *Subas* or Divisions and seventeen districts. The number of Divisions were later reduced to four and each Division was placed under a Revenue Commissioner called the Subedar. Gulbarga was one of such Divisions in which was included the district of Raichur. These four Divisions were further divided into sixteen districts and each district was under a magistrate or collector called a Talukdar. The districts were further divided into sub-divisions, each under a sub-divisional officer called Second or Third Talukdar, according to his grade in the service; there were two or three such sub-divisions in each district. There were two or three tahsils in each sub-division and a Tahsildar was in charge of each of them. Each village had a patel or headman.

For the administration of justice, there was a Divisional Judge in each Division, and the Talukdars and Tahsildars in the districts had the powers of first, second and third grade magistrates. The Talukdars, in busy places, had Judicial Assistants, and from their courts complicated cases were sent to the Divisional Courts.

Considerable administrative changes and territorial adjustments were made in the Raichur doab in 1905 as already referred to in Chapter I. Lingsugur district was abolished and divided between Raichur and Gulbarga districts. Yadgir taluk from Raichur district and the taluks of Shahapur and Shorapur from Lingsugur district were transferred to Gulbarga district. Though there were certain changes in the superstructure of the State administration now and then, the administrative set-up of the districts, by and large, remained the same.

As already stated earlier, the taluks of Koppal and Yelburga constituted the jagir of Nawab Salar Jung Bahadur, while Gurgunta in the Lingsugur taluk and Anegundi in the Gangavati taluk were small *Samsthanas* under local Hindu Rajas. These Jagirdars, more or less, enjoyed the powers of a ruler of an Indian State of the British days, but within the State of Hyderabad. They collected the land and other revenues within their jurisdictions through their own officers appointed by them. While the Jagir of Koppal had a Talukdar (Deputy Commissioner) and a Tahsildar, the *Samsthanas* had lesser officers to look after the revenue administration of the respective jagirs. These officers exercised the same powers as the revenue officers of the Nizam's Government for the recovery of land revenue, etc. The Desai of Menedhal in Kushtagi taluk also enjoyed the rights of a Jagirdar paying an annual lumpsum to the Nizam.

Jagir administration

While the Rajas of the *Samsthanas* were required to pay a tribute called *Peshkash* to the Nizam, the Jagirdar of Koppal was exempted from this. The annual income from the jagir estates of Nawab Salar Jung, including excise revenue, was estimated at Rs. 20,10,814. The administration of excise revenue was, however, taken over by the Nizam's Government in 1936 and the Jagirdars were paid a share of 2½ to 3 per cent out of such revenue collections.

The Jagirdars had also their own police and judiciary for a long time. They were, however, divested of their police powers in 1947 and of the judicial powers in 1948 and the same were taken over by the Hyderabad State Government. Though a Royal Commission on Jagir Administration and Reforms was appointed by the Nizam's Government in 1947 under the chairmanship of Sir Allion Rajkumar Banerji, no action had been, however, taken to implement its recommendations to reform the jagir administration in the State, which was then in a very unsatisfactory state. The promulgation of the Hyderabad (Abolition of Jagirs) Regulation, 1949, by the Military Government of Hyderabad, however, resulted in the taking over of all the jagirs by the Hyderabad State Government.

New Era

Soon after the Police Action by the Government of India in September 1948, the Nizam dismissed his Council of Ministers and the administration of the State was taken over by the Military Governor appointed by the Government of India. The Military Governor and the Chief Civil Administrator replaced the old Council of Ministers and a Civil Administrator was appointed for each district. The Civil Administrator of the district had, under him, a Deputy Civil Administrator and an Assistant Civil Administrator on the one side and a First Talukdar, two or three Second Talukdars and Tahsildars in the taluks on the other. The Civil Administrator of Raichur took immediate

steps to restore normal conditions in the district by imposition of curfew, the rounding up of unruly elements, formation of peace committees, etc. After a year, the Military Governor and his assistants were replaced by a new Council of Ministers. The Revenue Board was reconstituted to exercise supervision over the revenue and general administration of the districts.

In September 1949, all the jagirs in the Hyderabad State, numbering about 1,500 and comprising about 6,500 villages, were abolished. In Raichur area, the Koppal and Yelburga jagir taluks were added to the Raichur district as regular revenue taluks. Thus, the district, before the re-organisation of States in 1956, consisted of eleven taluks, namely, Raichur, Deodurg, Lingsugur, Manvi, Sindhanur, Gangavati, Koppal, Kushtagi, Yelburga, Gadwal and Alampur.

Popular Government

A full-fledged popular Government, consisting of thirteen elected representatives of the people, took charge of the administration of the Hyderabad State in March 1952. This marked a new stage in the political, historical and administrative evolution of the State and also served as a new spur to concerted efforts for development in all spheres of life. On the reorganisation of States on November 1, 1956, the Kannada-speaking areas of the Hyderabad State, comprising most of the three districts of Raichur, Gulbarga and Bidar, were included in the new Mysore State. Insofar as Raichur district was concerned, two of its taluks, *viz.*, Gadwal and Alampur, were transferred to Andhra Pradesh. Thus, after the reorganisation of the States, the Raichur district came to have only nine taluks, *viz.*, Raichur, Deodurg, Manvi, Sindhanur, Gangavati, Koppal, Kushtagi, Yelburga and Lingsugur. These taluks were grouped under three revenue sub-divisions, each under an Assistant Commissioner, with headquarters at Raichur, Lingsugur and Koppal. The Deputy Commissioner is at the head of the district administration. As before, the district continues to be under the Gulbarga Division, which is even now one of the four Revenue Divisions constituted in the new Mysore State for administrative convenience, the head of the Division being the Divisional Commissioner.

After the achievement of Independence, the district administration is comprehending a rather wide connotation of public administration. It has attained added importance with the launching of the Five-Year Plans and other development programmes since it provides the principal points of contact between the citizens and the processes of government. Besides collection of land revenue and provision of security of person and property as in the earlier days, the present-day public administration in the district embraces almost every field of human activity. But it is important to note that all the administrative functions should

be such as to conform to the provisions of the fundamental rights of the citizens as set out in the Constitution and the rule of law.

Multifarious functions

The functions of the present day district administration may be grouped, for purposes of convenience, into a number of fairly broad categories. The first group relates to the public safety, the protection of the citizen and of all his rights. It includes the maintenance of law and order and the administration of civil and criminal justice. The second group may be called the revenue and excise group, which is concerned with the assessment and collection of taxes and duties of different kinds. It includes land revenue, irrigation cess, income-tax, agricultural income-tax, sales tax, entertainment tax, stamp duty, court fees, registration fees, excise duties—both Central and State—of various kinds, taxes on motor vehicles and others. Under this goup may also be included recovery of loans which are advanced to cultivators, control regulations and deriving of revenue from liquor, drugs, etc., control and maintenance of government treasuries, land reforms, land acquisition, maintenance of land records, and including also the programmes of consolidation of agricultural holdings.

The third group consists of agriculture in all its aspects, animal husbandry, irrigation, communication and industries. These form part of the economic group of administrative functions. Then there is another group, which generally relates to the welfare and development functions, some of which are also economic. These include community development, co-operatives, public health, education, social welfare, panchayat-raj and others. Food and civil supplies stand in a category by themselves. Another duty cast upon the district administration is of dealing with calamities like floods, famines, fires, earthquakes and the like. The district administration is also concerned with the conduct of all elections to the parliament, to the state legislature and to the local bodies as also with the conduct of population census.

The next group with which the district administration is concerned is local self-government, which includes institutions like municipalities, taluk development boards and village panchayats. Finally, the district administration also exercises certain other executive functions of government which are not defined as such. This power to assume and exercise the executive authority of government becomes vitally important in periods of crisis endangering the life and security of the community. Though the list is not exhaustive, it demonstrates, to a certain extent, the sheer variety of functions which the district administration is called upon to undertake. Each one of the functions listed above contains quite a number of sub-functions, all of which need not be referred to here as many of them have been dealt with in the relevant chapters as also in Chapter XIII.

Although there are different functionaries at the district, sub-divisional and taluk levels to deal with these multifarious functions of the Government in the district, it is the Deputy Commissioner who has to bear the main brunt of the district administration under the guidance and supervision of the Divisional Commissioner.

Divisional Commissioner

The posts of Divisional Commissioners in the new State of Mysore were created by the Mysore Adaptation of Laws Order, 1956, under the provisions of the States' Re-organisation Act, 1956. The jurisdiction of the Divisional Commissioner, Gulbarga Division, extends over the district of Raichur along with the districts of Gulbarga, Bidar and Bellary. Upto 1st February 1966, the last district, *i.e.*, Bellary, formed a part of Bangalore Division and it was separated and included in the Gulbarga Division with effect from the 1st February 1966 for administrative convenience. The Divisional Commissioner is the head of the revenue administration within his jurisdiction. He plays a vital role in the general administration of the districts coming under his jurisdiction, not only in respect of revenue matters but also in respect of the activities of other departments. He acts as a link between the State Government and the district authorities in respect of all developmental and public welfare activities. He undertakes tours in the districts and supervises the general activities of all development departments and gives them guidance.

Tungabhadra Project Administration

In view of the numerous programmes undertaken under the Five-Year Plans and also the increasing tempo of developmental activities, great importance has been attached to the post of Divisional Commissioner. The Divisional Commissioner, Gulbarga, is also the *ex-officio* Administrator and, in that capacity, the head of the Tungabhadra Project Administration. He is invested with necessary financial and administrative powers and is responsible for co-ordinating the work of all development departments functioning in the Tungabhadra Project area. In this work, the Divisional Commissioner is assisted exclusively by a Deputy Administrator, with some ministerial staff, stationed at Sindhanur. However, the various development works in the Project area are attended to by the officers of the respective development departments, both at the district, sub-divisional and taluk levels, in addition to their normal departmental duties. The Administrator is also advised and assisted by three committees, *viz.*, (1) the Tungabhadra Project Working Group, (2) the Tungabhadra Project Advisory Body and (3) the Tungabhadra Project Irrigation Consultative Committee, which meet as often as necessary. While the Working Group consists of all divisional-level officers in the Division and the Deputy Commissioners of Raichur and Bellary districts, the Advisory Body consists, in addition to these officers, some non-official members including

some members of the State Legislature. The Irrigation Consultative Committee consists of the divisional heads of the Public Works and Agriculture Departments, the Deputy Commissioners of Raichur and Bellary districts and some non-officials, including some members of the State Legislature. Besides, for the purpose of securing all-round development in the area as expeditiously as possible, the Chief Engineers of Irrigation (South), Communications and Buildings, and Irrigation and Public Health, the Directors of Agriculture, Animal Husbandry and Veterinary Services, and Fisheries, the Registrar of Co-operative Societies and the Chief Conservator of Forests are expected to render every co-operation for co-ordination of their departmental activities in the project area under the guidance of the Divisional Commissioner. The progress of implementation of the various developmental schemes is reviewed by the Administrator in the meetings of the above-mentioned committees.

Other functions

Being the chief co-ordinator of the various development programmes in the district as a whole, the Divisional Commissioner convenes co-ordination meetings of the district officers periodically with a view to reviewing the progress of development works and removing difficulties and bottlenecks, if any, in their expeditious execution. He has to be specially vigilant against natural calamities like floods, famines and scarcity conditions and bestow his urgent attention on organising relief measures for alleviating the distress and hardships of the victims. He has also to be watchful about the rise in prices and scarcity of foodgrains and other consumer commodities and take suitable remedial measures.

All proposals from the Deputy Commissioner to the Government regarding revenue matters, community development programme, municipal administration and the like have to pass through the Divisional Commissioner's office and have to be scrutinised by the latter. The distribution and reappropriation of budget grants to revenue offices, community development blocks, taluk development boards and, to some extent, to municipalities are also the responsibility of the Divisional Commissioner. He is competent to inspect and control all revenue offices in the Division. He is the appellate authority above the Deputy Commissioners in matters of revenue administration, both in respect of revenue law and disciplinary proceedings against the revenue staff. In short, his functions may be described as appellate, inspecting, supervising, controlling, co-ordinating and advisory.

Deputy Commissioner

Since the district is the crucial unit of administration, the Deputy Commissioner is the crucial figure in the process of general administration of the district. As already stated, the main brunt of the district administration is directly borne by him, although he works under the supervision of the Divisional Commissioner. As the revenue head of the district, he plays a most prominent and

pivotal role in all aspects of district administration. The advent of democracy and the consequent increase in the tempo of developmental activities, have further increased his functions and responsibilities.

The main functions of the Deputy Commissioner, in general, may be defined as executive and his duties may be broadly classified as (1) revenue, (2) law and order, (3) development, (4) co-ordination and (5) public weal in general. In the general pattern of the district administration, he is the custodian of Government property in land—including trees and water—wherever situated, and, at the same time, the guardian of the interests of members of the public in land, insofar as the interests of Government in land have been conceded to them. All land, wherever situated, whether put to agricultural use or other uses, is liable to payment of land revenue, except in cases where it is expressly exempted by a special contract. Such land revenue is generally of three kinds: (1) agricultural assessment, (2) non-agricultural assessment and (3) miscellaneous. The duties of the Deputy Commissioner relate to the fixation, collection and accounting of all such land revenue. He has to see that the revenue due to Government is recovered punctually with the minimum of coercion and that all such collections are properly credited and accounted for. In order to carry out these and other relative duties, he has been invested with wide powers under the Mysore Land Revenue Act and Rules.

Revenue functions

The Deputy Commissioner is also responsible for the collection of fees and taxes under various other Acts in respect of irrigation, ferries and bridges, stamps, registration, etc. Any arrears, whether of Central or State Government, may be recovered as land revenue under the provisions of the relevant tax laws. If a party fails to pay the tax in time, the tax-collecting authority sends a certificate of tax arrears to the Deputy Commissioner of the district, who has powers to recover the amount in the same way as he does in respect of arrears of land revenue. The Mysore Land Improvement and Taccavi Loans Act regulates the grant of loans to agriculturists at cheaper rates of interest for financing their operations. The Deputy Commissioner estimates the loan requirements of his district and approaches the Government for sanction. He has to arrange for the proper distribution of the amount placed at his disposal and to cause recoveries to be made at the proper time.

As the head of the revenue administration of the district, he exercises all the powers under the Mysore Land Revenue Act, 1964, and Rules made thereunder. He is also responsible for the maintenance of land records and in addition, exercises various powers under several other Acts, such as the Mysore Land Reforms Act, the Land Acquisition Act, Mysore Irrigation Act, Mysore Religious and Charitable Endowments Act, Mysore Village

Panchayats and Local Boards Act and the Mysore Town Municipalities Act. He discharges also a quasi-judicial function in revenue disputes. The entire collection of the revenue from land is assigned to the village panchayats and taluk devlopment boards by the Govenment and the responsibility of allocating these funds rests with the Deputy Commissioner. He is authorised to survey and settle boundary disputes relating to lands and to take adequate and suitable steps for the succour of victims of floods, famines and such other natural calamities.

The Deputy Commissioner of the Raichur district has also an additional responsibility of implementing the several development programmes in the Tungabhadra Project ayacut area within his jurisdiction, with the assistance of the officers of the various development and other departments in the district and under the guidance and close supervision of the Divisional Commissioner, Gulbarga Division, who is the Administrator of the Tungabhadra Project. For this purpose, the Deputy Commissioner has been designated as the *ex-officio* Director of the Tungabhadra Project Administration in the district. He has to co-ordinate the efforts of the several departments in the district and see that the programmes are implemented expeditiously and also according to schedule.

Co-ordinating authority

Again, under the community development programme, the Deputy Commissioner is designated as the Deputy Development Commissioner. In that capacity, he is in overall charge of all the development blocks in his jurisdiction. He has to possess a clear picture of the working of the several departments at the district level so as to evolve an integrated approach to the various developmental activities. He holds periodical meetings of all the district-level officers (except the judicial officers), and also the officers at the block-level at which the block programmes and achievements are reviewed. He is also the *ex officio* Chairman of the District Development Council, which has to guide and coordinate the developmental activities of the several departments in the district and also those of the taluk development boards which help in the execution of the community development programmes in the district. He has also the overall responsibility for the successful implementation of the many schemes taken up under the Five-Year Plans, including social welfare work. Thus, co-ordination forms an important part of the Deputy Commissioner's functions.

Though the Deputy Commissioner is usually the District Registrar in many of the districts, in Raichur district a Special Deputy Commissioner functions *inter alia* as the District Registrar and, in that capacity, he controls the administration of the Registration Department in the district. The Deputy Commissioner is also the President of the District Soldiers', Sailors' and

Airmen's Board in an honorary capacity. Besides, he is also the Chairman of the Regional Transport Authority. The Deputy Commissioner also exercises supervision over local administration, census operations, elections, excise, food and civil supplies. He is enjoined to give effect to the notifications issued by the Government from time to time in respect of foodgrains and other essential commodities. He is also the custodian of all Muzrai institutions in the district under the provisions of the Mysore Religious and Charitable Endowments Act.

Magisterial functions

The Deputy Commissioner is the Executive District Magistrate of the district and in that capacity he is responsible for the maintenance of law and order. He is the head of all the executive sub-divisional and taluk magistrates in the district and has extensive powers under the Code of Criminal Procedure, the Mysore Police Act and other Acts for the maintenance of law and order. He has control over the Police insofar as law and order question is concerned and supervisory powers over the administration of jails and lock-ups in the district. With the separation of judiciary from the executive, the District Magistrate has ceased to deal with the actual dispensation of justice or with the trial process. His law and order responsibility involves two functions: firstly, he has to enforce law and order through the police and secondly, he has to take regulatory and penal action. He has to get persons bound over if there is any breach of law or to make preventive detention.

In his executive capacity, the District Magistrate is responsible for the issue of licences and permits under the Indian Arms Act, Indian Explosives Act, etc., and also for the supervision of the general administration of these Acts. He is also the licensing authority under the Mysore Cinematograph Act and exercises powers vested in him also under the Prevention of Untouchability Act and the like. Under the Foreigners Act, the Executive District Magistrate looks after the proper implementation of various instructions received from the Government in respect of grant of visa, passports, etc.

Deputy Commissioner's establishment

The Deputy Commissioner, Raichur, is assisted in his duties in the district headquarters by a Special Deputy Commissioner in revenue and registration matters and a Headquarters Assistant of the status of an Assistant Commissioner, who functions also as an Additional District Magistrate. Besides, there is a District Development Assistant who assists the Deputy Commissioner in his duties relating to community development and other developmental activities, an Office Assisant to supervise the work of subordinate staff in the office, a Food Assistant to assist the Deputy Commissioner in matters relating to food and civil supplies, a District Social Welfare Officer to deal with matters relating to

social welfare and also a District Planning Officer (of the rank of Block Development Officer) to assist in planning. The District Registrar (*i.e.*, the Special Deputy Commissioner), has also a separate Headquarters Assistant to assist him in matters relating to registration and stamps. The Food Assistant has also a Food Tahsildar to assist him.

Besides these officers, there are, in the Deputy Commissioner's office, a Taccavi Superintendent and an Endowments Assistant, both of whom are of the grade of Deputy Tahsildar, an Accounts Superintendent, eight Sheristedars in charge of the different sections, one I Grade Inspector for Endowments, two or three Accountants, about 30 First Division Clerks, 20 Second Division Clerks and eight Typists, with necessary class IV staff.

Assistant Commissioners

As already stated elsewhere, Raichur district has been divided into three revenue sub-divisions with headquarters at Raichur, Lingsugur and Koppal. Each of these sub-divisions is under the charge of an Assistant Commissioner who is responsible to the Deputy Commissioner. While the Raichur Sub-Division has Raichur, Manvi and Deodurg taluks under it, the Lingsugur Sub-Division consists of Lingsugur, Sindhanur and Kushtagi taluks. The Koppal Sub-Division has, under its jurisdiction, the other remaining three taluks of Koppal, Yelburga and Gangavati. The Assistant Commissioners of sub-divisions form the connecting link between the Tahsildars of taluks and the Deputy Commissioner. They have functions similar to those of the Deputy Commissioner, but at a lower level. This is generally the level at which a new recruit to the Indian Administrative Service starts his official career.

The Assistant Commissioners also exercise both revenue and magisterial powers. Their main revenue functions include (1) inspection and supervision of the work of the Tahsildars, Revenue Inspectors and Village Officers; (2) safeguarding the interests of the Government in land by regular inspection dealing with encroachments, breaches of the conditions of the tenure, etc; (3) conducting of annual *jamabandi* of taluks except for those where the Deputy Commissioner himself is to conduct the *jamabandi*; (4) hearing of appeals against the decisions of the Tahsildars and settling of cases regarding land acquisition matters; (5) crop and boundary marks inspection and the checking of *annewari* of revenue and the record of rights; (6) supervision over the realisation of government revenues, such as land revenue, betterment levy, repayment of *taccavi* loans, etc., and (7) assignment of lands and sanction of *taccavi* loans upto a limited extent.

The Assistant Commissioners are also Executive Sub-Divisional Magistrates and, in that capacity, they exercise certain

magisterial powers as specified in the Code of Criminal Procedure. These include power to ensure security and maintain peace, power to take security for good behaviour, power to pass orders to prevent apprehended danger to public peace, and power to hold inquests, etc. They have to keep the Deputy Commissioner informed of the law and order situation in their respective sub-divisions.

Tahsildars

At the rate of three taluks under each revenue sub-division, there are, in all, nine taluks in the district, under the charge of a Tahsildar each, who is directly responsible to the Assistant Commissioner of his sub-division and through him to the Deputy Commissioner. The Tahsildar is the central figure in the administration of the taluk. He is required to report on almost all revenue matters to the sub-divisional officer and also the Deputy Commissioner so as to enable them to take their decisions and has also to execute the orders passed by them. In regard to the annual demand and collection of land revenue, he has to keep ready all particulars which are required for conducting the annual *jamabandi* of the taluk. (The annual *jamabandi* is an audit of the previous year's accounts of the land revenue along with the checking of the current year's accounts). The Tahsildar is the most intimately concerned officer for determination of the amount of remissions and suspensions of revenue on account of failure of crops, etc.

The work of collection of land revenue in the taluk is also the responsibility of the Tahsildar. In addition to this, he has to effect recoveries of *taccavi* loans, *pot-hissa* measurement fees, boundary marks advances and irrigation cess, as also the dues of other departments like sales-tax, income-tax, etc., from the defaulters, at the request of the departments concerned. Applications for grant of *taccavi* loans are generally received by the Tahsildar. He conducts necessary enquiries in respect of the same through the Revenue Inspectors concerned and then decides about the eligibility and the quantum of loans that may be granted. He can himself grant lands and *taccavi* loans upto a limited extent. He must also be vigilant about the proper utilisation and repayment of the loans thus obtained by the agriculturists.

Another important duty entrusted to the Tahsildar is the levy and collection of water rates and maintenance cess under the Water Rate Rules and the Irrigation Act, respectively. He has also to attend to many other similar duties all of which need not be elaborated here. The duties and powers of all the revenue officers are defined in the Mysore Land Revenue Act and the Mysore Revenue Manual.

The Tahsildars are also Executive Taluk Magistrates and in that capacity they also exercise certain powers as specified in the Criminal Procedure Code. Their magisterial powers include power to disperse any unlawful assembly with the use of civil or military force, power to make order as to the disposal of property regarding which an offence is committed, power to recover penalty on forfeited bonds and to require fresh security, etc. With the authorisation by the State Government or the Executive District Magistrate, he may also issue orders calculated to prevent any apprehended danger to public peace and also hold inquests.

Revenue Inspectors

The nine taluks of the district have been further sub-divided into 56 circles or hoblies, each of which is under the charge of a Revenue Inspector. While the Sindhanur taluk has as many as fourteen circles, the Yelburga taluk has only three. In the revenue set-up of the district, the Revenue Inspector of a circle is an important official within his jurisdiction. He is directly responsible to the Tahsildar of the taluk in the administration of revenue matters in the circle and forms a link between the Tahsildar and the village officers. He has to supervise the work of the village officers and inspect village boundaries and boundary marks, all government and public lands and encroachments thereon and irrigation sources under the control of the revenue department. He has to acquaint himself generally with the agricultural conditions in his circle. He is also responsible for the collection of land revenue in the circle with the assistance of the Village Accountants. His other functions include also sub-division and demarcation of lands on request, maintenance of record of rights and inspection of mutation entries, scrutiny of village maps, enquiries into miscellaneous applications from the public and such other miscellaneous work as the Tahsildar may from time to time entrust to him.

Village Officers

Until a few years ago, the village establishment in the Gulbarga Division (except Bellary district) consisted of (1) Patwari (Shanbhogue), (2) Mali Patel (Revenue Patel), (3) Police Patel and (4) Seth Sanadi or Walikar. All these posts were held by hereditary succession. The Patwaris and Patels were paid cash remuneration on a fixed percentage basis of the actual land revenue collections. Out of the amount calculated according to the prescribed scale for a village, the Patwari got 50 per cent while the Mali Patel and the Police Patel got 25 per cent each. Seth Sanadis were given a reduction of Rs. 36 in the assessment of lands held by them. Those who held lands whose assessment fell short of Rs. 36 were also allowed a cash remuneration of Rs. 36 per annum in addition to being allowed to hold the lands free of assessment. Those having no lands were paid a cash remuneration of Rs. 72 per annum.

These hereditary offices were abolished by the Mysore Village Offices Abolition Act, 1961, which came into force throughout the State with effect from the 1st February 1963. Under the provisions of this Act, in the place of Patwaris, Village Accountants have been appointed as full-time Government servants on a salary basis. They are required to work under the guidance of the Revenue Inspectors. They have to maintain all prescribed registers, accounts and other records and, when called upon by any superior officer of the taluk or the district, are required to prepare all records connected with the affairs of the village which are required either for the use of the Government or the pubilc such as notices, reports, *mahazars* and depositions. They are also required to perform such other duties as may be entrusted to them by the Tahsildar, the Assistant Commissioner or the Deputy Commissioner. The present incumbents of the posts of Patels and other village officers are, however, being continued for the time-being without hereditary rights.

Law and Order

The administration of law and order is an important component of the general administration of the State, as also of the district. The police force of the district headed by the Superintendent of Police is responsible for the performance of all police functions including prevention and detection of crimes and prosecution of offenders. The District Magistrate is responsible for the criminal administration of the district. For this purpose, the Superintendent of Police and the police force of the district are under the general control of the District Magistrate. The police regulations provide specifically that the District Magistrate is the head of the criminal administration of the district and the police force is required by law to assist him to enforce that authority. Thus, while the internal departmental control of the police force as such vests in the Superintendent of Police, for purposes of law and order in the district, it is subject to the overall control and direction of the District Magistrate. For instance, whenever an Executive Magistrate is present on a scene of rioting or widespread disorder, he assumes charge of the situation and the police have to act under his orders. It is he who can give the order to fire or to use force. But the actual internal administration of the police force, including discipline and training and deployment of the force, is largely the responsibility of the Superintendent of Police, discharged in accordance with his own departmental procedure.

For administrative convenience, Raichur district has been divided into three police sub-divisions, with headquarters at Raichur, Lingsugur and Koppal. Each of these sub-divisions is under the charge of a Deputy Superintendent of Police, who is directly responsible to the Superintendent of Police, Raichur. These sub-divisions have been further divided into six circles,

each under the charge of a Circle Inspector. There is also a fairly good number of armed policemen in reserve at the district headquarters.

Another element in the law and order component of the district administration is the jail. There is a District Jail at Raichur, where persons convicted of various offences as well as prisoners under trial, are housed. The District Surgeon, Raichur, is the *ex-officio* Superintendent of the Jail. Besides, there are seven Judicial Lock-ups or Sub-Jails in the district which are looked after by the Sheristedars of the taluk offices wherein they are situated. The Jail and the Judicial Lock-ups in the district are under the general control of the District Magistrate.

Judiciary

Insofar as the judicial administration is concerned, the District and Sessions Judge, Raichur, is the head of the judiciary in the district. The judiciary deals with civil as also criminal cases. The District and Sessions Judge has a separate and independent sphere of work and his functions have been described in detail in Chapter XII. On the civil side, there is a Civil Judge at Raichur and a Munsiff in each of the taluk headquarters, who exercises also powers of a judicial magistrate. There are nine such Judicial Magistrates' Courts in the district called Munsiff Magistrates' Courts, at the rate of one at each taluk headquarters. The District Magistrate, the Sub-Divisional Magistrates and the Taluk Magistrates, referred to earlier, fall under the category of Executive Magistrates.

Other District Officers

The previous feudal administration did not pay much attention for the economic and social development of the area. With the advent of Independence, great emphasis was laid on all-round development and on raising the standard of living of the people. The Indian Constitution devotes sixteen of its Articles to what are described as the directive principles of State policy. They mainly relate to the welfare of the people, of the community as a whole as well as of the individual, in both economic and social fields.

In keeping with the objective of promoting the welfare of the people, the existing departments were strengthened and reoriented and several new ones were created. As a result, a number of economic and social administration and development departments have been functioning both at the State and district levels, in addition to the revenue, law and order and judicial departments. They relate to agriculture, irrigation, education, health, industries, co-operation, community development and several other fields of development. The following are the various divisional and district-level officers of departments in the district,

whose functions and jurisdictions have been dealt with in Chapter XIII and other relevant chapters :—

1. Joint Director of Agriculture, Gulbarga Division, Raichur.
2. Deputy Director of Agriculture, Raichur.
3. Joint Registrar of Co-operative Societies, Gulbarga Division, Raichur.
4. Deputy Registrar of Co-operative Societies, Raichur.
5. Superintending Engineer, Tungabhadra Canal Circle, Yermaras.
6. Superintending Engineer, Tungabhadra Project Circle, Munirabad.
7. Superintending Engineer (Electrical), Munirabad.
8. Executive Engineer (Electrical), Raichur.
9. Executive Engineer, Minor Irrigation Investigation Division, Raichur.
10. Executive Engineers (Communications and Buildings), Raichur and Koppal.
11. Deputy Administrator, Tungabhadra Project Administration, Sindhanur.
12. Labour Officer, Raichur.
13. District Educational Officer
14. District Surgeon
15. District Health and Family Planning Officer
16. District Officer, Animal Husbandry and Veterinary Services.
17. Assistant Director of Industries and Commerce
18. Assistant Superintendent of Fisheries
19. Assistant Superintendents of Land Records (one general and one for hissa survey).
20. Coconut Development Officer, Sindhanur
21. Assistant Fruit Development Officer, Raichur
22. District Employment Officer
23. District Marketing Officer
24. Divisional Forest Officer
25. District Treasury Officer
26. Regional Transport Officer
27. District Statistical Officer
28. District Excise Officer
29. District Publicity Officer.

Besides, the Central Government has some of its offices in the district for the collection of income-tax, excise duties, administration of postal, telegraph and telephone services and the railways. (*See* also Chapter XIII).

CHAPTER XI

REVENUE ADMINISTRATION

History of assessment

REVENUE administration in Raichur district has been the result of a gradual process of evolution from the indigenous practices which prevailed in the erstwhile Hyderabad-Karnatak area and other contiguous parts of the Deccan plateau. It explains primarily the relationship between the Government and the persons interested in land.

Even before the days of Manu, the great law-giver of ancient days, the income from land revenue constituted the entire income of the Government. Land revenue is possibly the only source of revenue of the Government whose incidence falls on a great majority of the population. It is, however, difficult to say when precisely this levy on gross produce of the land originated and in what form it was at that time charged. So it has almost become customary to trace the history of revenue administration from the days of Manu. According to him, the State obtained one-twelfth to one-sixth of the gross produce of the land assessed upon a village as a whole during normal times and in times of war or natural calamity, the share of the Government was raised to one-fourth of the produce. This was generally the guide-line for the Hindu kings.

During the rule of the Vijayanagara kings, one-sixth of the gross produce was regarded as the rightful share of the sovereign. In the earlier days of Muslim administration, the share of the State was converted into *khiraj* or tribute payable on land. The share of the State was, however, greater than before. With the gradual expansion of the Muslim kingdom, there came about a change in the method of assessment. The estimates of the share of the king came to be assessed on the standing crops. Subsequently, the system of paying land revenue in cash was introduced, replacing the old *batai* system. Traces of settlement made by Bahmani kings and Adil Shahi rulers were found in some places.

The area of land in Raichur for purposes of revenue assessment was calculated not on the acreage but on considerations mainly relating to the produce it yielded. This system was in

vogue previous to the annexation of the district by the British. The scales as determined during the Adil Shahi dynasty and afterwards by the Mughals were known as *khandee*, *kudow*, *paily* and *koorgy* (a *khandi* equalled 20 *kudows*, a *kudow* consisted of 100 *pailies* and two *pailies* were equivalent to one *koorgy*). A *koorgy* of land was roughly estimated at 4½ acres of land. It is necessary here to describe what a *koorgy* was, because that was the unit of a holder in those days. A piece of land on which three seers of jowar seeds could be sown by using six bullocks and three men in a day was known as a *koorgy*. This was the basis which determined the extent of land of a holder and the total assessment he had to pay to the Government. In some village records, the scales known as *moorkhee* and *koro* were followed while entering the area of lands. A *moorkhee* of land was roughly equal to 2¼ acres while a *koro* was equal to 18 acres.

The revenue assessment per *koorgy* of land was fixed according to the classification of the land; this was arrived at after a technical examination of the quality of the soil. Four regular classes of land appeared as a result of such examination and were called (1) *regur* (black cotton soil), (2) *milwa* (black and red soil), (3) *masab* (red soil) and (4) *shore* (alkaline soil). Assessment varied according to the nature of the soil. As stated earlier, the revenue demand was fixed on the basis of a single *koorgy*.

In the earlier years, a *koorgy* of the first classification was assessed from Rs. 5 to Rs. 10, the second classification from Rs. 3 to Rs. 8, the third from Re. 1 to Rs. 5 and the fourth from annas eight to Rs. 2. Assessment on wet lands which were irrigated by means of canals and *nalas* depended entirely on the supply of water and the nature of the soil as classified above. The assessment of such lands, ordinarily, varied from Rs. 20 to Rs. 150 per *koorgy*.

The rate on sugarcane lands was fifty per cent more than the usual wet assessment. Paddy fields and *bagayat* or garden lands which were irrigated by wells were assessed according to the nature of supply of water, at rates ranging from Rs. 10 to Rs. 25 per *koorgy*.

Generally, the collection of land revenue began immediately after the Dasara. The assessment was collected ordinarily in cash for all the dry cropped lands, but in most cases, payment was made in kind in respect of paddy fields. This system of assessment and payment in kind was known as the *batai* system. Soon after the harvest, half of the produce of the land was supposed to be given by the cultivator as the share of the *Sircar* which was sold on the spot to the cultivators, or financiers. Usually, the rates charged in the scale of the produce were

enhanced at the discretion of the authorities. Thus the *batai* system was purely arbitrary in execution.

The revenue was collected in four equal instalments, for each of which the time was specified as follows: the first instalment was to be paid in the month of *Shravana*, the second in *Ashwini*, the third in *Margashira* and the final instalment in *Magha*.

In each of these instalments, one-fourth of the revenue was collected and the cultivators were forced to liquidate the whole of their demand before the rabi crops were harvested. When the grains were ripe for harvest, the owner was not allowed to cut it till he had given a written agreement and produced security for the next year's cultivation. If he failed to do so, the produce was confiscated and the land made over to another person. In case of seasonal fluctuations or unfavourable harvest, when the cultivator was unable to pay his instalment in full, the dues were realised by the sale of his property or from his relatives. If the cultivator died or ran away owing to coercion, his dues were levied on all the cultivators of that particular village. The fields owned by the deceased or the runaway person were not allowed to lie waste for the next year's harvest. The patels or patwaris were compelled by the State to till such lands either of their own volition or by the help of the villagers and pay the assessment. In respect of the collection of revenue assessment on the mango and the tamarind groves, together with all the fruit trees that existed in the fields were given out on contract basis for a stipulated amount. If the season proved unfavourable and the amount of contract fell below the collections of the previous year as a result of low yield, a tax was levied on all the cultivators and the balance made good from them. If the authorities found that the crop was abundant, and the cultivators could pay a larger assessment, they charged an extra assessment which ranged from one to four annas per rupee. Thus the cultivators were compelled to pay additional taxes and every effort was made by the revenue officials to deprive the poor cultivator of any extra earning that came his way. In some taluks, the officers in-charge of collection work looked also to the condition of the land-holder. If the land-holder happened to be a well-to-do man, the entire assessment of revenue on his lands was collected in one lumpsum immediately. If, on the other hand, the land-holder was unable to pay the revenue, he was allowed five to six months time so as to enable him to pay it on the first day of the ensuing year (*Varsha Pratipada*).

During British administration

There came about a change in the mode of assessment and collection in 1853 A.D., when the area was assigned to the British administration which changed the entire structure of revenue administration from one of absolute arbitrariness to that of some orderliness. The district remained under the British

administration for a little over six years and a half after which it was restored to the Nizam. During the years of the British administration, the whole of the cultivable land was measured roughly and its area was compared with that as entered in records, and at the same time the *koorgy* was converted into acres. The waste lands remained unmeasured for some time since they were vast in extent. Later on, even this area was measured and recorded in acres. A *check-bandi* of all the village lands was prepared, the fields being numbered and their situations marked in the records in relation to the adjoining ones. The Tahsildar, who came into the picture for the first time, rationalised the assessment on all cultivable fields according to the nature of the soil. He was assisted in his task by the Patel, Patwari and the Village Panch. The Tahsildar of the area acted according to the instructions of his superior revenue officer who was called the Deputy Commissioner.

Pawatee book

After the necessary measurement and marking of boundaries of all lands, the system of recording the results of the work in *pawatee* book was introduced. Each cultivator who owned lands was supplied with the book, sealed and signed by the Tahsildar, in which the area of his field and the assessment rates were recorded. As soon as the Patwari received each instalment of revenue from the cultivator, he made a note to that effect in the *pawatee* book.

The system of examining the *pawatee* books was introduced in the year 1266 F (1857-A.D.). They were examined by the Assistant Commissioner who held the office above the Tahsildar. Whenever a complaint of burdensome levy was brought before him, an enquiry was conducted and if the complaint was justified, a reduction in the total assessment was allowed or in the alternative, a piece of waste land was given as relief to the cultivator. All possible precautions were taken not to effect such reduction in a way that would result in a decrease in the total revenue of the village. The Government of the day, however, guaranteed that no cultivator would be deprived of his possession of land unless he tendered resignation of his own free will. The cultivators could submit such resignations for *masab* (ordinary) land in the month of May and for black soil in July in a year. After all the disputes were settled, a *kowl* (agreement) was entered into for a certain fixed period between the cultivators and the Government providing no scope for any enhancement of the revenue during the period of *kowl*. After all the boundary disputes were settled and the lines marked off, masonry pillars were erected at every corner of a field to determine the actual dimensions of the holding. These pillars were constructed in brick and *chunam*, in conical shapes of different heights from 1½ to 3 feet. Where the lines of boundary ran in straight lines, stones from 3 to 4 feet in height were fixed at different points. Maps showing the total

number of pillars in each village were got prepared which were duly signed by the Patel, Patwari and the Village Panch and kept in the taluk office for future reference. Besides the several advantages derived from this arrangement, a great deal of help was forthcoming in fixing the line of boundaries during successive survey operations. However, with the passage of time, many of these pillars were broken or were levelled to the ground making it difficult to trace the boundaries without referring to the taluk office records.

Cultivation of waste lands

Various rules were framed for the cultivation of waste lands. Whenever waste lands were granted to the tillers for cultivation, no rent was levied on such lands in the first year. In the second year, only 1/8th of a rupee per acre was levied. In the third year, a quarter of a rupee per acre was charged. During the fourth year of cultivation, half a rupee per acre was levied as land revenue. For the fifth and successive years, the assessment was levied in full. Facilities for digging wells were afforded to and lands which were irrigated by well water were assessed separately. *Kowls* were granted for a fixed period in respect of waste lands and during the pendency of the *kowl* only dry assessment rates were levied. No extra sum was charged on lands which were cultivated under well irrigation. The provision of all these facilities by Government gave confidence to the cultivators and a large area of waste lands was brought under cultivation and the land-tilling class heaved a sigh of relief. Many of the old and disused wells were repaired and many new ones were sunk.

Collection of revenue

The land revenue assessment was collected in three instalments according to the nature of the crop. For khariff, two annas in the rupee of revenue was collected in November, six annas in December and eight annas in January. The rabi (late crops) was also divided into three seasons, falling due in January, February and March. In some parts of the district, the revenue was realised in three instalments, *viz.*, four annas of revenue in the month of *Azur*, eight annas in *Bamon* and four annas in *Farwardi*. All possible precautions were taken not to allow the time of collection exceed 15th of the appointed month.

At about the same time, the system of giving *baluta* to Patels and Patwaris from the cultivators was abolished and a sum called *Aya Patti* was paid to them; this was collected at the rate of one anna per rupee on the revenue. All the Inam lands which were granted to Patels and Patwaris for the services rendered by them to Government were taken over by the State. The Patels and Patwaris, who were thus dispossessed of their lands, were paid compensation in cash—ordinarily at five per cent of the total assessment.

While all these changes in the pattern of revenue administration were going on and were not put yet into full practice, the district was made over by the British to the Nizam for the services rendered by him during the 1857 uprising. The Nizam's Government, after taking control of the area, scrutinised the rules formulated by the British and came to the conclusion that they were beneficial to the State as well as to the cultivators. The revenue rules and regulations were continued on the same lines. Based on the British revenue pattern, the Nizam's Government, subsequently, introduced the *zilla-bandi* system.

Before 1860

The general picture of the district before the British took over its administration into their hands, was vividly described by Col. Anderson in his report submitted to Government in 1860. It would be interesting to quote a few lines from his report in order to understand the condition of the district. "This district was in an exceedingly depressed state when the British took it over seven years ago. Under the previous rule, there was no security for life and property and the only law apparently recognised was that of the strongest. The country was very thinly populated and much of the area was waste. It is indeed surprising that a large portion of the population remained in the district when the British territory was within a few miles. Every precaution, however, was taken to prevent emigration. Heavy security was exacted from those who were suspected of entertaining any intention of the kind and if any one did succeed in making his escape, his goods and cattle were forfeited and his wife and children imprisoned. This is the state of affairs described by the people as having existed under the previous rule. They informed me that for a man to emigrate from the 'Moglai' and take his family and the bulk of his goods with him required at least two years' careful arrangement with the certainty of imprisonment, fine and other harassments. On these districts coming under the management of the British, no record of field rates was forthcoming. Under the previous rule, the farming system was extensively resorted to, any farmer being liable to be ousted at a moment's notice in case of a higher bid being made. In some cases, the sum due from the village was fixed and the village officers made responsible for it. The village officers collected the revenue as they could from whom they liked and as much as they could. They were satisfied as long as the quota of land revenue was realised and if anything surplus was left over, it was retained by the village officers. In case of refusal to pay, the village officers, on their authority, sold the cultivators' goods and cattle. If the full amount of revenue was still not forthcoming and concealed, torture was freely resorted to. (Standing in the sun with a large stone on the head, inhaling the smoke and dust of chillies, etc.). The village officers were imprisoned or otherwise coerced in case the village revenue was not made good. There was no limit to the demand on any individual. If he had agreed for a

certain rate at the commencement of the year, he had no security whatever that double that amount would not be taken from him in the course of the year without even the form or pretext of justice or reason. Neither was there any proprietary right in land recognised nor was there any record to prove the title. At the mere pleasure of the village officers, the land was taken from one and given to another. In addition to what may be called legitimate plundering on the part of the village officers, the unfortunate cultivator was also subjected to other depredations. Village waged war against village and one zamindar against another, the cultivators as a matter of course going to the wall between the contending parties. The state of the tract when it came under the British management may be readily imagined. It could hardly be worse and the time has been too short to admit of entire recovery. The average population is under 100 per square mile, while in the adjoining districts of Belgaum and Dharwar it exceeds 150 per square mile. On the district coming into British management, everything feasible was done to elevate the agricultural interest. Land was freely given out on *kowl* on most moderate terms. Care was taken to obviate undue exactions and the total sum actually collected was at first exceedingly low and is even still very moderate indeed. But one unavoidable deficiency undermined and, to some extent, interfered with all attempts at improvements, namely, the want of any reliable data on which to base assessment. A rough survey based on a conversion of the ancient native land measures was made and rates of assessment fixed but the data was inaccurate."

The above report underlines the chaotic state of affairs in revenue assessment and management. The British put the house in order to a certain extent and ceded the territory to the Nizam.

Reforms of Salar Jung

Nawab Sir Salar Jung, who became the Prime Minister in 1853, introduced some important changes in the revenue system of which the abolition of the farming system was the most outstanding one.

The lands of the cultivators were individually assessed and the cultivators were granted proprietary possession of their holdings. The annual assessment was fixed on the basis of the average payment of revenue made during the past ten years. The system of annual *Jamabandi* was introduced. These reforms went a long way in contributing to the well-being of the cultivators. However, the fields were not accurately measured and the soils classified according to the relative value of the land. As a result of this, the assessments were unequally distributed on different holdings. The raiyatwari system, with cash payments, was introduced in 1866.

There was a practice to collect the assessment on fruit trees, mango topes, etc., with no definite principle or rates. Subsequently, it was regularised and fixed at six annas per tree which was to be collected annually and this was in force for several years. In 1281 F. (1872 A.D.) the Government of Hyderabad issued a circular prohibiting such collections. In respect of assessment of lands where two crops were taken, specially in the case of paddy fields, some well defined principles were followed. When the cultivator raised two *fusls* (crops) on a piece of land, in a year, an additional assessment was realised from him in the proportion of four annas in a rupee value, irrespective of the nature of the second crop he raised. In the case of sugarcane, the cultivator was charged one and a half times of what he would otherwise be charged had he raised only one *fusl*. When the cultivators grew plantains on the rice fields, such fields were charged one and a half times the rates charged for single *fusl* of rice land for a period of three successive years. If the plantain plants were seen in the fourth and fifth years as well, the cultivator was charged another half rate of the assessment for as many years as he continued to grow plantains.

Every field under irrigation was measured annually by the village Patwari who would submit a detailed information of such survey to the Tahsildar along with the usual returns. The Tahsildar satisfied himself as to the correctness of the survey by inspecting the villages concerned either by himself or through his officials. These inspections were generally made in the month of *Shravan* or *Bhadrapada* so as to keep the papers ready for annual *Jamabandi*. In the same way, the district officers conducted test inspections either by themselves or through their officials as to the correctness of the assessment rates. Thus the assessment on a great number of fields fluctuated every year.

Zilla-Bandi system

The *zilla-bandi* introduced by Mr. Abdul Rehman, the Settlement Superintendent, in 1905 was indeed a landmark in the revenue administration of the area. The *zilla-bandi* system of revenue administration put the revenue department on a systematic basis. When the revenue department was organised on the lines similar to those obtaining in the adjoining British-governed tracts, it was found necessary that many old-time practices had to be abandoned in order to evolve a reasonable and secure system in the interests of peace and orderliness. The chief functions of this new Department were the regularisation, in all its phases, of the revenue administration, improvement of the revenue collection and the consolidation of the fiscal position of the State. The land assessments were modified from time to time.

Land Records

The land records system was originally started in the Hyderabad State in 1919 (1328 Fasli) on the lines prevailing

in British India. In the beginning, it was contemplated to provide all the settled and announced areas with land records. But its full realisation was not possible. At this stage, a separate Land Records Department was found to be necessary. It was established in 1937 under a separate Commissioner. Besides keeping land records, the Department had other allied functions also like conducting of project surveys. Record of Rights was first introduced in the State of Hyderabad in 1936. The work was subsequently transferred to the Land Records Department in 1938. The chief function connected with Records of Rights was the compilation of village-wise registers showing particulars of all private rights over lands, whether they had been acquired by registered documents, by succession, by oral agreements or otherwise and rights relating to owners, occupants, mortgagees and tenancy of assignees, rents of revenue, public rights, easements and Government rights. The Land Records Department maintained the raiyatwari records in an up-to-date condition, showing all the necessary changes brought about in the cultivated fields. Since the entire area in the State was surveyed and announced and since there was much revision, the District Survey Officers had to perform the duties of keeping the settlement records in an up-to-date condition, incorporating in them various details. The entries in the records related to various changes that took place, together with inspection notes of the boundaries, the repair of boundary stones when found damaged, the date of such repairs and the defining of holdings when the cultivators applied for the same. The organisation of land records and record of rights having been completed, the two Departments were amalgamated in 1354 F (1945). The chief function of the settlement section of the Department was to carry out the survey of *khalsa* and *non-khalsa* villages and attend to the revisions after expiry of the sanctioned period of settlement.

Survey and Settlement

Prior to 1875, some attempts had been made to have some survey of the lands and to settle the rates of assessment. In 1875, the Government of Hyderabad decided on introducing a regular survey and settlement in the State. Consequently, a Settlement Department was established in 1876. For the first time, the survey and settlement of the *Diwani* areas of Hyderabad State were introduced in 1879 in the Paithan taluk of the Hyderabad district. Most of the personnel were drawn from the Bombay province as they were experienced in survey and settlement work. A school to train persons in the work of surveying the lands was started in Hyderabad. In the beginning, the principles laid down by Messrs. Goldmid and Wingate were followed. In calculating the land revenue payable to the Government, the Hyderabad Government adopted the empirical basis of assessment. The system is so called because the settlement officer took several factors into consideration at the time of settlement

or revision. The assessment was ultimately based on the subjective impression of the settlement officer.

According to the Imperial Gazetteer of India, Hyderabad State (Provincial Series), the general principle of assessment was to take half the net profits, after paying the cost of cultivation, etc., as the State's share. The system of basing the Government assessment on net profit was recognised by Mr. Pringle in Poona as early as 1827. It was given up owing to its complexity and mainly because the assessment was too high. A new system devised by Mr. Goldmid and Lt. Wingate was introduced about the year 1840 in Poona, and then with slight modifications was extended to the rest of the Bombay Presidency, and later on it was adopted in Hyderabad.

New system

According to this system, the unit of survey was taken as a field and the standard area was an acre for purposes of survey work. The lands were measured with the help of cross staff and 33 chain. Soon after the measurements were over, maps were drawn on the scale of 20 chains to an inch. The lands were classified after careful enquiries, based on the fertility of the soil, into several groups and their relative values were expressed in fraction of a rupee, 16 annas representing the best class of soil. Such classification of land was made only to serve as the base by which the total demand could be fixed. The settlement officer was left to formulate his own impressions and suggest rates on the consideration of the general factors like the existing conditions of the agricultural classes, the state of particular villages, the amount realised by the Government, the prices of the crops, etc. This served as the base for determining the rate of assessment. In order to do it effectively, the taluks were first grouped according to marked and permanent distinctions such as climate, situation and general condition of cultivation. Then the revenue and the economic history of the tract was examined and the total demand for the area under settlement was determined. The aggregate demand thus determined was distributed over the individual survey numbers with reference to the classification of the soil. Thus the settlement officer's final decision depended not upon the formal working out of the results based on theory, but rather upon his subjective impression.

The above system was followed, while conducting the original settlement, with slight modifications. By the time of revision settlements, a limitation was imposed on the enhancement of rates, *viz.*, 30 per cent for a taluk or group for dry crop, 66 per cent for a single village and 100 per cent for an individual holding. In case the enhancement was beyond the limits mentioned above some concessions were allowed. In 1952, the revision settlement operations were taken up in Hyderabad-Karnatak area. By that time, the work of taking into account the *pot-kharab* that had

been brought under cultivation was completed. There were not many conversions from dry land and garden land in this part of the State. In order to standardise the rates and remove the existing disparities between different areas, as suggested by the Taxation Enquiry Committee, the Government of Hyderabad had started an agro-economic survey of all the taluks due for revision. On the basis of this survey, an upward revision ranging from one to two annas on wet lands and annas two to four for dry lands was proposed by the Settlement Commissioner of Hyderabad. No further action was, however, taken in this respect.

The jagir villages in the district which had not been brought under regular survey were surveyed and settled by the end of 1954. The Hyderabad Land Revenue Act No. VIII of 1317 Fasli as amended upto the end of 1357 Fasli contained certain provisions which formed the basis for the survey and settlement in the district. An objection raised by the Taxation Enquiry Committee, appointed by the Government of India in 1952, was that the settlement system required an elaborate machinery, huge labour, time and expenditure. It was pointed out by the Committee that there were disparities in assessment where the characteristics of the soil, nature of rainfall, the crop pattern, etc., were the same. The Committee also suggested that the surcharges super-imposed on the assessments had a tendency to accentuate further the existing disparities. Another defect of the system was that the nature of the crop raised on a particular land did not play any direct part in the fixation of assessments.

Between the years 1951 and 1955, hissa survey or record of right survey was completed. This was to determine the exact holdings in the survey numbers. There were instances in which more than one or even four or five owners were mentioned in a survey number. Separate records were prepared to determine the exact ownership. After the re-organisation of States, the Government of Mysore appointed Sri K. M. Mirani, the then Deputy Commissioner for Settlement, to formulate uniform principles and procedure of settlement which could meet most of the objections raised by the Taxation Enquiry Committee. Many of his suggestions have been followed in the present system of settlement operations.

Revised procedure

According to the revised procedure, the basis of settlement is the yield of the principal and money crops and prices of the agricultural produce. The unit of settlement is a zone which comprises a contiguous whole taluk or portions of taluks of the same district or of more than one district which are homogeneous in respect of soil characteristics, physical configuration, climate and rainfall and nature of predominant crops grown in that area. A settlement officer is appointed for each zone as per the provisions of section 116(2) of the Mysore Land Revenue Act, 1964. He

is required to form groups in each zone on the basis of three main factors, *viz.*, (i) physical configuration, (ii) climate and rainfall and (iii) yield of principal crops and their prices. While thus forming groups within the zone, he should also take into consideration the marketing facilities, communications, standard of husbandry, population and supply of labour, agricultural resources, variation in all the area of occupied and cultivated lands during the previous thirty years, wages and ordinary expenses of cultivating principal crops including the wages of the cultivator for his labour in cultivating the lands. The settlement officer is to collect the information in respect of the above factors from various departments. While arriving at the average yields of principal crops, he has to conduct crop-cutting experiments or rely upon such experiments conducted by other departments. The average yield of principal crops in each group is arrived at separately for dry, wet, garden and plantation crops. On the basis of this, the cash value per acre is calculated. The standard rates are then fixed for each class of land at a certain percentage of the cash value. The settlement officer then submits his report proposing the revised standard rates to the Deputy Commissioner of the district concerned. The standard rates proposed are then notified in the *chavadi* of each village. A copy of the settlement report is placed in the office of the Deputy Commissioner for the public to go through it. The interested parties can file their objections on the report with the Deputy Commissioner within three months from the date of the publication of the report. All the objections so received by the public and the results of the hearings conducted by the Deputy Commissioner on the request of the parties concerned are then transmitted to the Government through the Commissioner for Survey, Settlement and Land Records. The settlement reports together with the objections are laid before each house of the State Legislature. After both the Houses approve the settlement reports with or without modifications by resolutions moved in this behalf, the State Government passes orders in conformity with such resolutions. The Government then notifies the standard rates in the official Gazette indicating the date from which these rates would come into effect. The Deputy Commissioner of the district then notifies the sanctioned rates in the village *chavadi*.

Survey records

As a part of the survey system, various books are being maintained in the district for recording the observations. The *pucca* book, as it is called, is an important document wherein all details of measurements relating to the *tippana* are calculated and entered. The *tippana* book contains all the survey numbers of the village. There is a *tippana* book for each village in the district. In the *pucca* book one can see final figures of each number. All triangular plots, rectangular plots, length and breadth of each plot, total acres and guntas are inscribed in the *pucca* book. (A particular feature of the entries in the old books was the language

they employed for purposes of recordings; it was Marathi, traceable, of course, to the influence of the Peshwa rule).

The other book which is equally important is the classification book (or *prati* book) in which the nature of the land, *i.e.*, wet, dry or the *bagayat*, first order, second order and similar other details that are required for determining the classifications are entered.

The class register is a book which contains the rates of assessment, classification of the land, survey number, *phot* number, previous number, the *pattedar's* name, total area of the holding, *phot* crop, *phot-kharab*, etc.

To determine the extent of uncultivable portion of a survey number, a detailed inspection is made and the area which is so declared as uncultivable is deducted from the total area held. The remaining land is classified as dry, wet or *bagayat*. The distance between the survey number and the village site is entered separately in the class register.

Sur naksha is a *katcha* map prepared during the survey which denotes a particular survey number, *chaltha* numbers, base lines, physical features of the field, etc. The map is drawn according to a scale and obtainable on payment of a prescribed fee. The maps are in cloth and can easily be carried in the pocket. The fair copy of the maps prepared out of *sur-naksha* is called *pucca-naksha* which is done in cloth-bound paper.

Akar-bund is a final settlement register containing the latest assessment rates brought about by survey settlement. In this register, the survey number, *phot* number, *hissa* number, total area of the holding, *phot-kharab* details, dry, wet or *bagayat* details and the amount of assessment to be paid based on the standard rates approved are entered. It also furnishes the information regarding the source of water supply and also the nature of *phot-kharab*.

A brief description of the survey and settlements effected in each taluk of the district of Raichur is given below.

Deodurg taluk

The initial survey of the Deodurg taluk was taken up in 1884 and the rates approved by the Government in 1888 were Rs. 1.07 for dry, Rs. 6 for wet and Rs. 3.43 for garden lands. These rates were subsequently revised to Rs. 1.29 for dry, Rs. 6.86 for wet and Rs. 3.43 for garden under the first revision settlement which was completed in 1911. The total amount of assessment under the first revision settlement was Rs. 2,70,325. The rates were subjected to a further revision in 1944 under the second

revision settlement. The approved rates under this settlement were Rs. 1.41 for dry, Rs. 7.71 for wet and Rs. 3.43 for garden lands.

The rates of assessment and the area assessed under each classification of land and the amount assessed under the second revision settlement were as follows :—

Sl. No.	*Nature of crop*		*Assessment rate*	*Area in acres*	*Amount assessed*
			Rs. P.		Rs. P.
1.	Dry	..	1.41	3,03,629	2,73,877–61
2.	Wet	..	7.71	3,665	21,884–74
3.	Garden	..	3.43	1,999	5,208–46
			Total ..	3,09,293	3,00,970–81

These rates were further enhanced by the Government recently and they are as follows :—

Group		*Dry*	*Wet*	*Garden*
		Rs. P.	Rs. P.	Rs. P.
I	..	1.40	7.71	3.43
II	..	1.18	7.71	3.43

Gangavati taluk

The initial survey and settlement of Gangavati taluk was completed in 1887. The increased rates as sanctioned by the Government were Rs. 1.07 for dry, Rs. 6.86 for wet and Rs. 3.43 for garden lands. The rates approved after the first revision settlement, which was completed in 1910, were Rs. 1.29 for dry, Rs. 6.86 for wet and Rs. 3.43 for garden lands.

The second revision settlement of Gangavati taluk was completed in 1934 and the approved rates were Rs. 1.50 for dry, Rs. 12.86 for wet and Rs. 6.86 for garden lands. The third revision of these rates will fall due in 1973. However, after a lapse of eight years from the date of the approval of the second revision rates, *i.e.*, in 1942, the rates were slightly enhanced. The enhanced maximum rates that are in force are Rs. 1.50 for the first group and Rs. 1.40 for the second group in respect of dry lands, Rs. 12.86 for both the first and second groups in respect of wet lands and Rs. 12.86 for garden lands for both the groups. A separate water rate is being levied on all lands which are benefited by the waters of the Left Bank Canal of the Tungabhadra Project.

The rates of assessment and the amounts assessed under each classification after the second revision settlement, were as detailed below :—

Sl. No.	Nature of crop		Assessment rate	Area in acres	Amount assessed
			Rs. P.		Rs. P.
1.	Dry	..	1.50	2,49,108	2,31,719-33
2.	Wet	..	12.86	8,146	1.21,317-50
3.	Garden	..	6.86	826	5,364-50
			Total ..	2.58,080	3.58 401-33

Kushtagi taluk

A survey of 100 villages of Kushtagi taluk was made by Captain W. C. Anderson and the rates in respect of these lands were announced in 1861. The survey work of the remaining villages was completed in 1885 and the rates for these villages were also announced. However, the initial settlement of the taluk as a whole was made in 1888 and the sanctioned rates were Rs. 1.50 for dry, Rs. 6.00 for wet and Rs. 3.43 for garden lands. In respect of lands where paddy crops were raised, the rates were Rs. 6 for the first group and Rs. 5 for the second group of lands for a single crop, whereas the rates for lands where double crops were raised were Rs. 7 for the first group and Rs. 6 for the second group.

The first revision settlement of the taluk was completed in 1910 and the sanctioned rates were Rs. 1.50 for dry, Rs. 6 for wet and Rs. 3.86 for garden lands. These rates were slightly modified under the second revision in 1931 and they stood at Rs. 1.50 for dry, Rs. 6.86 for wet and Rs. 3.86 for garden lands.

After the third revision in 1964-65, the rates were fixed at Rs. 3.46 for the first group and Rs. 1.54 for the third group of lands in respect of dry lands, at Rs. 15.65 for both the first and third groups of lands in respect of wet lands and at Rs. 3.46 for the first group and Rs. 1.54 for the third group of lands in so far as the garden lands were concerned.

The rates of assessment and the area assessed under each classification of land and the amounts assessed under the second and third revision settlements are as follows :—

Sl. No.	Nature of crop		Assessment rate	Area in acres	Amount assessed
			Second Revision		
			Rs. P.		Rs. P.
1.	Dry	..	1.50	2,68,370	2,10,713-91
2.	Wet	..	6.86	996	5,350·83
3.	Garden	..	3.86	570	1,646-19
			Total ..	2,69,936	2,17,710-93
			Third Revision		
1.	Dry	..	3.46 I 1.54 II	3,17,602	4,16,471-40
2.	Wet	..	15.65	1,886	9,276-14
3.	Garden	..	3.46 I 1.54 II	593	1,148-42
			Total ..	3,20,081	4,26,895-96

Koppal and Yelburga taluks

The Koppal and Yelbuga taluks formerly constituted the jagir of Nawab Salar Jung. The initial survey and settlement in both these taluks was commenced in the year 1889 and the rates approved by the Government, in 1905, were Rs. 1.29 for dry, Rs. 10.29 for wet and Rs. 5.14 for garden lands. After the first revision settlement, the new rates approved in respect of Koppal in 1919 and in respect of Yelburga in 1922 were Rs. 10.29 for wet and Rs. 5.14 for garden lands. As for the dry lands, the rate was Rs. 1.29 for Koppal and Rs. 1.50 for Yelburga. The second revision settlement was begun in 1948 in both the taluks. It was during this period that the Jagir Abolition Regulation was promulgated and the lands were integrated with the *diwani* in May, 1950. Survey of all the cultivable lands of the taluks was continued and the new rates approved in 1964-65 were Rs. 2.80 for second group and Rs. 1.54 for third group in respect of dry lands and Rs. 15.65 in respect of wet lands for both the groups. In the case of fourth group of lands applicable to Koppal taluk only, the rates were Rs. 3.65 for dry, Rs. 15.65 for wet and Rs. 3.65 for garden lands.

The classification of area, assessment rates and the amount assessed under each class of land in respect of the first and the second revision settlements are as follows :—

Koppal Taluk

Sl. No.	Nature of crop	Assessment rate	Area in acres	Amount assessed
		First Revision		
		Rs. P.		Rs. P.
1.	Dry	1.29	2,69,050	2,00,477.54
2.	Wet	10.29	4,993	58,453.98
3.	Garden	5.14	950	4,535.08
	Total ..	..	2,74,993	2,63,466.60
		Second Revision		
1.	Dry	2.80 II 1.54 III 3.65 IV	2,35,467	3,50,854.37
2.	Wet	15.65	5,377	15,445.98
3.	Garden	2.80 II 1.54 III 3.65 IV	1,563	4,002.54
	Total ..	..	2,42,407	3,70,302.89

The increase in revenue over that of the first revision is Rs. 1,06,836.29.

Yelburga Taluk

Sl. No.	Nature of crop	Assessment rate	Area in acres	Amount assessed
1	2	3	4	5
		First Revision		
		Rs. P.		Rs. P.
1.	Dry	1.50	3,43,268	2,83,302 38
2.	Wet	10.29	786	4,480 40
3.	Garden	5.14	1,016	4,022.30
	Total ..	..	3,45,070	2,91,805.08

1	2	3	4	5
		Second Revision		
1.	Dry	2.80 II 1.54 III	3,43,444	5,92,654.37
2.	Wet	15.65	857	3,251.58
3.	Garden	2.80 II 1.54 III	1,040	1,980.98
	Total ..	..	3,45,341	6,07,896.93

The increase in revenue over that of first revision is of the order of Rs. 3,06,081.55.

Lingsugur taluk

It was in 1888 that the initial survey and settlement of the Lingsugur taluk was completed. The approved rates of this settlement were Rs. 1.07 for dry, Rs. 6.86 for wet and Rs. 3.43 for garden lands. The rates which were revised in 1910 after the first revision settlement, were Rs. 1.29 for dry, Rs. 6.86 for wet and Rs. 3.43 for garden lands. During the second revision, which was completed in 1930, the rates in respect of wet and garden lands were the same as those approved under the first revision. But in respect of dry lands, the rates were enhanced to Rs. 1.41.

In 1965, another revision of these rates was made after the third revision settlement, the approved rates being Rs. 1.53 for the first group and Rs. 1.31 for the second group of lands in respect of dry lands and Rs. 6.54 for wet and garden lands of both the groups.

The rates of assessment and the area assessed under each classification of lands and the amounts assessed in respect of the second and the third revision settlements were as detailed hereunder :—

Sl. No.	*Nature of crop*	*Assessment rate*	*Area in acres*	*Amount assessed*
1	2	3	4	5
		Second Revision		
		Rs. P.		Rs. P.
1.	Dry	1.41	4,05,272	3,18,649.20
2.	Wet	6.86	603	3,544.47
3.	Garden	3.43	837	2,365.25
	Total ..	..	4,06,712	3,24,558.92

1	2	3	4	5
		Third Revision		
1.	Dry	1.53 I 1.31 II	4,05,875	3,71,840.42
2.	Wet	6.54	724	1,087.98
3.	Garden	6.54	954	4,693.54
	Total ..	..	4,07,553	3,77,621.94

The total revenue increase over that of the second revision is Rs. 53,063.02.

Manvi taluk

In 1884, the initial survey and settlement work of Manvi taluk was commenced and the rates approved by the Government in 1888 were Rs. 1.07 for dry, Rs. 6 for wet and Rs. 2.57 for garden lands. These rates were revised under the first revision in 1911, and again in 1931 and a further revision was made in 1964-65. The next revision will be due in 1995. The details of the rates that were in force during the original settlement and subsequent revision settlements are presented below :—

Sl. No.	*Particulars*	*Assessment rate*		
		Dry	*Wet*	*Garden*
		Rs. P.	Rs. P.	Rs. P.
1.	Original Settlement (1888) ..	1.07	6.00	2.57
2.	First Revision (1911) ..	1.29	6.86	3.43
3.	Second Revision (1931) ..	1.71	6.86	3.43
4.	Third Revision (1965)—			
	(a) I Group	1.74	6.54	6.54
	(b) II Group	1.53	6.54	6.54

The classification of the area and the rates of assessment and the amount assessed under each class of land for the second and the third revision settlements were as follows :—

Sl. No.	Nature of crop	Assessment rate	Area in acres	Amount assessed
		Second Revision		
		Rs. P.		Rs. P.
1.	Dry	1.71	3,98,840	4,48,029.75
2.	Wet	6.86	2,500	13,431.61
3.	Garden	3.43	1,854	6,416.58
	Total ..	..	4,03,194	4,67,877.94
		Third Revision		
1.	Dry	1.74 I 1.53 II	1,99,175	2,58,883.65
2.	Wet	6.54	2,00,294	3,02,370.03
3.	Garden	6.54	4,390	9,487.03
	Total ..	..	4,03,859	5,70,740.71

The increase in revenue over that of second revision is of the order of Rs. 1,02,862.83.

Raichur taluk

During the short period of British administration, a summary settlement of the taluk was made and waste lands were given out for cultivation on easy terms. Later, the initial settlement survey of Raichur taluk was completed in 1889 and the rates were finally approved by the Government in 1891. An area of 2,78,992 acres was brought under this settlement. The sanctioned rates were Rs. 1.40 for dry, Rs. 7.71 for wet and Rs. 4.29 for garden lands.

The first revision settlement of the taluk was completed in 1909 and the rates were approved by the Government in 1911. The rates as sanctioned by the Government were Rs. 1.50 for dry, Rs. 8.57 for wet and Rs. 4.29 for garden lands. In 1944, these rates were revised under the second revision settlement which stood at Rs. 1.71 for dry lands, Rs. 9.43 for wet and Rs. 4.29 for garden lands. The classification of the area and assessment rates and the amount assessed in respect of second revision settlement were as follows :—

Sl. No.	Nature of crop		Assessment rate	Area in acres	Amount assessed
			Rs. P.		Rs. P.
1.	Dry	.. ..	1.71	2,81,734	2,87,689.87
2.	Wet	.. ..	9.43	10,203	85,571.15
3.	Garden	.. ..	4.29	1,277	5,005.28
			Total ..	2,93,214	3,78,266.30

Sindhanur taluk

In 1879, the lands of the Sindhanur taluk were subjected to survey and settlement and the approved rates were announced in 1888. The sanctioned rates of this initial settlement were Rs. 1.07 for dry, Rs. 6.86 for wet and Rs. 3.43 for garden lands. In 1910, these rates were revised under the first revision. The approved new rates were Rs. 1.29 for dry, Rs. 6.86 for wet and Rs. 3.43 for garden lands. By the time of the second revision settlement, which was completed in 1930, some area of the taluk which was under jagir administration was brought under the settlement operations. The new rates as sanctioned by the Government under the second revision remained the same in respect of wet and garden lands as those approved under the first revision. But the rate for dry lands was raised to Rs. 1.41.

The third revision settlement of the taluk was completed in 1963 and the rates were approved in 1965. The new rates as sanctioned are Rs. 1.74 for the first group and Rs. 1.54 for the second group in respect of dry lands, and Rs. 6.54 in respect of wet and garden lands for both the groups.

The rates of assessment and the area assessed under each classification of lands and the amounts assessed under the second and the third revision settlements were as detailed hereunder—

Sl. No.	Nature of crop		Assessment rate	Area in acres	Amount assessed
1	2		3	4	5
			Second Revision		
			Rs. P.		Rs. P.
1.	Dry	.. ..	1.41	3,59,880	4,06,055.39
2.	Wet	.. ..	6.86	386	1,994.30
3.	Garden	.. ..	6.43	1,000	3,231.56
			Total ..	3,61,266	4,11,281.25

1	2	3	4	5
		Third Revision		
1.	Dry	1.74 I 1.53 II	2,71,699	3,88,845.86
2.	Wet	6.54	88,347	1,33,615.07
3.	Garden	6.54	2,833	6,975.50
		Total ..	3,62,879	5,29,436.43

There has been an increase in the revenue assessment after the third revision settlement to a tune of Rs. 1,18,155.18. A separate water rate is being levied in respect of lands which are benefited by the waters of the Tungabhadra canal.

In 1947, the then Government of Hyderabad issued instructions for assessing the lands irrigated under wells as dry and the maximum dry rates were to be fixed for such lands. As such, for land revenue assessment during the third revision, the lands irrigated under wells were considered as dry lands. It was then decided to levy a consolidated rate for lands which received an assured supply of water from the Government sources of irrigation including the Tungabhadra canal. In 1954, the Government of Hyderabad fixed special rates for *Abi* crops at Rs. 12, for sugarcane at Rs. 35, for fruit gardens at Rs. 15, for eight months' gardens at Rs. 18, for rabi crops at Rs. 6 and for irrigated khariff crops at Rs. 4. In respect of lands under light irrigation, concessions for a period of three years were sanctioned; there was no assessment for the first year, but in the second year 50 per cent of the assessment was to be paid and in the third year, full assessment was levied. The same process was followed in respect of those cultivators who brought waste lands under cultivation subject to the condition that one third of the holdings granted to them should be brought under cultivation in the first year, half of the holding in the second and full holding in the third year. If, by the end of the second year, the cultivator failed to bring half of the holding under cultivation, he was asked to pay the full assessment. In respect of such wet lands, the assessment rates were reduced to dry assessment rates and in the first and second years, one-fourth of the wet assessment, in the third year, half of the wet assessment and in the fourth year three-fourth of the wet assessment and in the fifth year full assessment was charged. Subsequently these rates were doubled according to the Mysore Land Revenue Surcharge Act, 1962. The Government decided to levy water rates under the provisions of the Mysore Irrigation Act for the lands benefited by the major and medium irrigation

projects and the schedule of water rates as levied under the Act since the 1st July 1965 is as follows :—

Sl. No.	Particulars	*Rates in respect of irrigation works capable of irrigating not more than 100 acres*	*Rates in respect of irrigation works capable of irrigating more than 100 acres*
1	2	3	4
		(per acre)	(per acre)
		Rs. P.	Rs. P.
1.	Sugarcane :		
	(a) to be harvested within a period of 12 months	20-00	30-00
	(b) to be harvested after a period of 12 months but before 18 months ..	30-00	45-00
2.	Paddy	11-00	16-00
3.	Jowar, maize, ragi, *navane*, *sajje*, pulses, greengram, wheat, cotton, groundnut, vegetables, sweet potatoes, gingelly, chillies, onions, tobacco or coriander	5-00	8-00
4.	Arecanut, plantain, betel-leaves, turmeric, lime, orange, pomegranate, cocoanut, pepper, mulberry, or any fruits ..	12-00	20-00
5.	Paddy crops grown for the second time in any revenue year	5-50	8-00
6.	For jowar, maize, ragi, *navane*, *sajje*, pulses, greengram, wheat, cotton, groundnuts, vegetables, chillies, potatoes, sweet potatoes, gingelly, onion, tobacco or coriander grown for the second time in any revenue year ..	2-75	4-00
7.	Manurial crops	3-00	4-00

The amounts of demand and collection relating to water rates in the district of Raichur from 1965-66 to 1968-69 are as follows :—

Year	Demand	Collection
	Rs. P.	Rs. P.
1965–66	32,96,543–53	11,52,849–00
1966–67	32,21,866–49	4,15,704–23
1967–68	32,39,983–26	6,80,706–27
1968–69	60,11,747–83	9,14,611–83

Land Revenue collection

At the time of the *zilla-bandi* reform, land revenue was derived from raiyatwari villages, leased lands, *peishkash*, *pan-maqtas*, fruit trees and miscellaneous allied sources. The tax on fruit trees was subsequently dispensed with. There were formerly four different categories of lands in the district, *viz*., *khalsa*, *hissa-jagir*, *bil-maqta* and *maafi-jagir*. The *khalsa* lands were purely Government lands paying full assessment. The *hissa-jagir* villages paid to the Government a certain share of the local collections, which generally fluctuated every year. The *bil-maqta* villages paid annually a certain fixed sum as quit-rent to the Government, irrespective of the revenue realised by *Maqtedars* who were not liable to any enhancement of the fixed Government demand. The *maafi-jagir* lands had been alienated and paid no revenue to the Government. Prior to the introduction of the raiyatwari system, the land revenue of the State together with certain other cesses used to be charged out to contractors. This system was known as *tahud*. If the revenue was charged out to an influential resident of the district, as was frequently the case in some parts of the State, the transaction was called *sarbasta* or *bil-maqta*. The *tahud* or *sarbasta* tenure was a lease for a specific period and the amount to be paid was liable to alteration after the expiry of the period of *kowl*.

The management of assessing the holdings and prompt collection was entrusted to a *Tahuddar*. He had to pay the *Sircar* a certain fixed sum annually and the internal revenue management was entirely in his hands. He collected the revenue either by *Amani* or by under-letting a number of villages to zamindars known as petty *Tahuddars*. These were the patels, patwaris or the principal zamindars who were entrusted, according to their demand, with a certain number of villages and had to pay a fixed sum of money without any regard to either favourable or unfavourable seasons. In case these zamindars performed their contract satisfactorily, they were permitted to continue the collection of revenue next year also. The petty revenue officials were authorised to collect the revenue in cash or in kind according to their choice and they could deprive the cultivator of his possession and make it over to another at any time without any

consideration of his rights and labour expended on his holding and in such cases no attention was paid by any of the officials to the complaints of the cultivators. These petty zamindars had to pay the revenue by regular instalments on the prescribed date and if they failed to do so, their property was confiscated and sold by public auction. Even by so doing, if the amount fell short of what might be required, they were chained and kept in confinement in dark dungeons till the whole amount was paid. Sir Salar Jung I abolished this system as it was found to be prejudicial to the peasantry and the State.

The revenue of those villages which were not given on *Tahuds* was collected by *Chota Naibs* and *Shekdars* each of whom held charge of several villages. Their day-to-day duty was to prepare a statement wherein details regarding the area of the holding, the names of the cultivators and the amount of revenue collected from them were entered.

After the introduction of the regular survey and settlement in the district, the system of collecting the revenue was also changed. The collection of land revenue in the district was recovered in two instalments. The popular term in usage for the revenue payment is *kist*. The first instalment called *khariff kist* was recovered from 15th January to 31st January. The first *kist* was recovered in full allowing of no arrears. The second instalment called the *rabi kist* was recovered from 15th April each year. The collection of land revenue was managed by the Tahsildar of the taluk, Deputy Tahsildar, Revenue Inspector, Patwari and Patel. Now the duty of collecting the assessed revenue is the special responsibility of the Tahsildars, Revenue Inspectors and Village Accountants. The dates for the payment of the assessment rates are fixed by the revenue authorities. In normal years, all the land-owners are bound to pay the full land revenue. The harvested crops of the defaulter-land-owners are released for sale by the Deputy Commissioner of the district and the sale proceeds are adjusted towards land revenue arrears. According to the Land Revenue Act, the Deputy Commissioner of the district can take possession of the entire village for non-payment of tax and appoint special officers for collecting the arrears. A statement showing the land revenue demand, collection and balance of the district for the years from 1957-58 to 1968-69 is given in the general Appendices. There has been a gradual increase in the land revenue demand over the decade as can be seen from the following figures :—

1957–58	..	**Rs.**	**42,24,084**
1961–62	..	**Rs.**	**62,87,080**
1964–65	..	**Rs.**	**1,22,28,956**
1967–68	..	**Rs.**	**1,82,23,773**

Jagirs

In the early part of the 18th century, Asaf Jah brought with him from North India a number of followers, both Muslim and Hindu. To the Muslim nobles, he granted jagirs or estates on military tenure and employed them as his generals. He employed the Hindus principally in administrative work in the Departments of Revenue and Finance. To them also he granted some jagirs as remuneration for their services, and all these jagirs whether granted for civil or military purposes, came to be considered as hereditary in different families. In many cases, the assignment in the first instance was either for a stated term or, more usually, for the life-time of the holder, lapsing on his death to the State; it was frequently renewed to his heir on payment of the *nazrana*. It was sometimes specified to be a hereditary assignment, without which specification it was held to be a life-tenure. Thus there were in the State a number of Nawabs and Rajas who were all recognised and confirmed in their possessions on payment of a tribute and they were allowed to exercise a kind of semi-independent jurisdiction within the limits of their estates.

Koppal, in Raichur district, consisting of Koppal and Yelburga taluks, was a large and important jagir and it was held by the Salar Jung family. The important jagirdars were fully authorised to collect land revenue, local cess and other taxes which were not prohibited in the *khalsa* areas. They were entitled to recover them in accordance with the terms of the *sanad* or with the permission of the Government. The land revenue was collected by the jagirdars directly. The excise revenue was, however, taken over by the Hyderabad Government in October 1936.

The big jagirdars were, in varying measure, responsible for the administration of their jagirs. In almost all such important jagirs, except those under the Court of Wards or Government supervision, revenue collection was completely in the hands of the jagirdars who used to appoint and maintain staff of their own. A Jagirs Revenue Recovery Regulation was passed in 1946, limiting the powers of the jagirdars and their officers in respect of revenue collections.

Some of the *samsthans* were of ancient origin tracing their history to the pre-Asaf Jahi period. There were fourteen such *samsthans* in the former Hyderabad State, of which Anegundi and Gurgunta belonged to the Raichur district. All the *samsthan*-holders had to pay a tribute called *peishkash* to the ruler. These *samsthans*, unlike *paigahs* and *ilaqas* of premier noblemen, were compact and separate administrative units.

Lands which were the subject of State grants and the revenue from which was assigned, came under the category of non-*khalsa* lands. Small jagirs, which came under this category, were free grants of lands or one or more villages as a reward for

some conspicuous service rendered, or for maintaining the status and dignity of the grantee. This jagir tenure was classified under eight different heads in accordance with the nature of the grant: (*a*) *altamgah* jagirs, (*b*) *zat* or personal grants, (*c*) personal grants, (*d*) *tankhwah* jagirs, (*e*) *jagir nigah dasht zamiat* or jagirs intended for keeping armed forces, (*f*) *maqta*, (*g*) *oomli* grants and (*h*) *agraharas*.

Altamgah jagirs were revenue-free grants made under the red-seal of the king. It was a perpetual and hereditary grant and the right of interest conveyed by it was not transferable by sale, gift or bequest. These jagirs were considered to be of the highest order and the most coveted.

Zat jagirs or personal grants of large areas of land were given for the maintenance of the grantee and were originally tenable for life-time only. If, however, the *sanad* conferring such grants contained and words indicative of permanency, the grant was treated as one in 'perpetuity'. Formerly, on the death of the grantee, the jagir was attached and re-issued in favour of his eldest son by another *sanad*.

Personal grants were grants intended for the maintenance of the holder and his family. These were also attached on the death of the sanad-holder and re-issued to his son and generally became hereditary.

Tankhwah jagirs, as the name implies, were grants of land made to meet the salaries due to the grantees for services rendered by them to the ruler.

Jagir nigah dasht zamiat or jagirs intended for keeping the armed forces were granted in lieu of remuneration for the supply of armed forces. These were renewed often in the name of the sons or grandsons of the grantee on his death, but sometimes they were attached and annexed or if the supply of forces diminished, the grant also was reduced correspondingly.

A *maqta* was the conditional or unconditional grant of village for which a fixed amount was paid by the grantee as *pan-maqta*.

Oomli grants were also similar to *maqtas*. The only distinguishing feature was that the grantee got one-third of the revenue collected and the remaining two-thirds went to the Government.

Agraharas were the special grants made to Hindu priestly families for religious purposes. The Government collected the assessment.

Apart from these grants, there were some jagirs granted for purposes of maintaining religious institutions like temples, mosques, etc. Such grants were classified as *maash-mashroot-ul-khidmat.*

In addition to these assigned lands, there were minor inams. An inam holding was a grant of land in respect of which the State had alienated its right to the land revenue. Inam lands were scattered in many villages.

Atiyat was a conditional or un-conditional inam or gift in the shape of land bestowed by the king or the ruling authority on deserving persons or subordinates in recognition of their distinguished services in lieu of a monthly salary or for the maintenance of the grantee and his family.

During the latter part of 19th century, Sir Salar Jung looked into the chaotic conditions of the jagirs, some of which were then in the hands of undeserving persons and felt the need for establishing a department for the investigation of jagirs and inams. In 1876, a separate department called *Dariaft Inamat* was created. When this department seriously began to tackle the issue, many forged documents claiming rights over properties came to its notice. Several commissions were appointed under the Atiyat Department between 1822 and 1851 to settle the disputes among jagirdars and inamdars. Later on, a small branch was set up under the Revenue Secretary, which worked between 1866 and 1876 and settled a number of disputes. A new commission was appointed in 1886 under Mr. Dunlop who was subsequently made the Inam Commissioner with several Deputy Commissioners under him. In 1932, the Atiyat Department was brought under the Revenue Department.

It is necessary to mention here that the status of jagirdars in the ex-Hyderabad State was quite different from that of the zamindars in the permanently settled areas of the Indian Union. It was observed by the Jagir Commission of 1947 that "the jagirdars in Hyderabad do not have any right to the soil. They are entitled only to the revenue due from the land." In addition to collecting land revenue of a particular tract of land assigned in their favour, some big jagirdars had jurisdiction over excise, forests and fisheries within their jagirs. The right of collecting excise revenue was taken over by the Hyderabad Government in 1936, as stated earlier. They were exercising judicial and police powers as well.

A commission was appointed in 1356 Fasli (1947) to enquire into jagir administration and to suggest reforms. The report of this commission served as a background for the abolition, later in 1949, of about 1,500 jagirs comprising about 6,500 villages

in the Hyderabad State. The Jagir Abolition Regulation promulgated by the Military Government on the 15th August 1949 was also a considerable advancement on the recommendations of the commission.

The transfer of administration of the jagirs to the Hyderabad Government took place between the 16th September and 28th September 1949, under the orders of the Military Governor. The jagirs granted to a temple or a mosque or to any institution established for a religious or public purpose were also taken over by the Government under the provisions of the Jagir Abolition Regulation. In order to bring about speedy and effective transfer of jagir villages, a Jagir Administrator was appointed. All the Civil Administrators (District Collectors) and First Talukdars were appointed as Assistant Jagir Administrators within their respective jurisdictions. Finally, all the jagirs were integrated with the *diwani* area by the 5th May 1950.

Several ameliorative measures were taken by the Government in jagir villages soon after their merger in the *diwani* area. The Settlement Commissioner took up the survey of the unsurveyed villages. As a provisional measure against the existing high rates of assessment in the jagir areas, the Government announced a general remission of 12½ per cent in land revenue of all jagir areas for 1950. The *pattedari* rights were also protected in the jagir villages.

Tenures

Land tenure means the manner in which the land is held or cultivated. Theoretically, the raiyatwari tenure does not contemplate any middleman between the land-holder and the State as in the case of the zamindari estates; still, as the registered occupant was not always and necessarily the actual cultivator, there were certain tenures which were inferior to that of the registered occupant (*pattedar*), based on contract or custom in the raiyatwari villages. The forms in which the land was actually held and cultivated under the raiyatwari system were thus classified as (1) *pattedari*, (2) *pot-pattedari*, (3) *shikmidari* and (4) *asamishikmi*. Besides, there were other tenures in the *khalsa* areas namely *pan maqta* and *ijara*. It is worthwhile in this connection to give a short description of the various tenures that existed in the raiyatwari tracts of the area.

Pattedari was a simple occupancy wherein the occupant cultivated the land personally or through hired labour. *Pot-pattedari* was a tenure where two or more cultivators held a joint *patta*. The *pattedar* in the case of *pot-pattedari* could neither evict the *pot-pattedar* nor enhance the assessment payable by him. The *pot-pattedar* had to pay land revenue in proportion to the share held by him and so long as he continued to pay it, he could not be evicted from his holding.

Shikmidari was a tenure where the occupant made over the land to cultivators on certain conditions. Such cultivators were known as *shikmidars* and they could not be evicted as long as they carried out the terms of their agreement with the registered occupant. *Shikmidars* were permanent tenants and possessed rights almost similar to that of *pattedars*.

Asami-shikmis were tenants-at-will. The *Asami-shikmis* Act (1354 Fasli), 1945, was enacted on the lines of the Bombay Tenancy Act, 1939, to protect the interests of such tenants. They were responsible to the holders for the payment of rent. After 12 years of continuous tenancy, they could be deemed to be *shikmidars*, but in practice it was difficult for them to prove such a period of continuous possession.

Pan-maqta was a *kowl* or tenure by contract in which lands were given to the holders on a fixed quit-rent without liability to enhancement. The rights of these *pan-maqta*-holders were thoroughly examined by the Inam Commission and only such as were proved to be valid were confirmed.

Ijara was a special type of tenure governed by contracts made between the State and *ijardars*. This tenure was introduced by Sir Salar Jung I, with a view to repopulating deserted villages and to bringing under cultivation large tracts of cultivable land which were lying waste. Under this system, land was assessed at light rates subject to progressive increase till full assessment was reached, the period of concession varying from five to thirty years and in some cases extending to forty years.

Sarf-e-khas lands were the sole property of the Nizam, the revenue of which was a contribution to his privy purse. After the Police Action, however, these lands were merged in *diwani* or *khalsa* lands. These lands became an integrated part of the State and the distinction between *diwani* and *sarf-e-khas* was abolished. On account of the unrestricted right of transfer which was allowed to the occupant or the *pattedar*, a class of non-cultivating owners or *pattedars* came into existence. They leased their lands to tenants and became rent-receivers. This development under the raiyatwari system of tenure was noticed by the Famine Commission of 1879. In paragraph 32 of their report, they observed that " in consequence of the tendency on the part of those who are recorded as ryots to sublet their lands or part of them and to live on the difference between the rent they receive and the revenue they pay to the Government, a considerable class of subordinate tenants is growing up, who have no permanent interest in the land and who pay such high rents that they must always be in a state of poverty. These subordinates are not recorded or recognised in the Government registers, but the existence of such a class involves the same evils as are noticed

elsewhere. We think that the question should be submitted to the consideration of local governments whether it is contemplated under the revenue settlement that ryots should be permitted to sublet their lands and if so whether measures should not be taken for recognising the status of such sub-tenants and recording the area they hold, the rent they pay and the conditions of their tenure."

It is interesting to note also the following observation of the Agrarian Reforms Committee (1949): "Absentee landlordism and tenancy farming had their origin thus in the latter half of the 19th century. It was during this period that for a variety of reasons, national and international, land became for the first time a commodity of value to be bought and sold in the market as any other commercial commodity. By reason of the peculiar security that land as property affords, it came to possess a value greatly inflated and out of all proportion to its yield-capacity. Possession of land has often been a passport for prestige and status in society. As a cumulative effect of all the above factors, people from all walks of life began acquiring lands not for purposes of cultivation by themselves, but as a source of business or commercial investment. In course of time, this tendency became more and more pronounced as a result of which lands increasingly passed out of the hands of owner-cultivators into the hands of non-cultivating classes like money-lenders and others, who lived mostly away from the land and whose sole interest in the land was the amount of rent they could get by letting it to others. As the time went by, the disassociation between ownership and the cultivation of land became more and more pronounced and the number of cultivating owners began to decrease progressively."

Tenancy in non-diwani areas

Tenancy in the non-diwani areas had a different history and came about in three different ways: (1) by the unauthorised claims of the jagirdar to a right in the soil, whereby he sought to treat cultivators in the jagir area as mere tenants, (2) by the jagirdar leasing his lands to others, and (3) by the occupants in the jagir area sub-letting their lands to others. Some jagirdars were also in the habit of insisting upon the payment of *nazrana* or premium in the shape of one or two years' assessment before they accorded *pattedari* rights to old cultivators. It was found that some jagirdars, while they allowed freely *pattedari* rights to old cultivators, did not permit the *pattedars* to sell or mortgage the holdings without their permission. This permission was sometimes granted on the *pattedar* paying a premium. There were also cases where the holders of the alienated villages, after giving *pattedari* rights to cultivators on payment of a premium, deprived them of these rights later. Conditions in jagir villages where survey and settlement had not yet been done were still worse. The jagirdar called himself a *pattedar* of many fields in the villages, even old cultivators being entered as his *kowldars*. These

people were not allowed to sell lands cultivated by them. The State, from time to time, had to intervene to make the position clear in jagir areas and to safeguard the rights of cultivating occupants. With a view to putting an end to the controversy in respect of right to the soil created by the unauthorised claims of the jagirdars, the Government took power to introduce compulsorily survey and settlement operations in the jagir areas. Finally, the Government by an amending Act incorporated certain amendments in the Land Revenue Act which declared the respective rights of jagirdars and of cultivators under them.

Pattedars

According to the Hyderabad Land Revenue Act, *pattedar* was defined as the person who was directly responsible to the Government for payment of land revenue and whose name was entered as such in Government records, whether he was personally in possession of the holding or through his *shikmidar*. In the case of non-diwani lands, *pattedar* was defined as the person who was directly responsible to the jagirdar for payment of land revenue, whether his name had or had not been entered as such in the jagir records.

The *shikmidari* right had a wider connotation than tenancy and included co-sharers as well as permanent tenants. For all practical purposes, all *shikmidars* were treated as having proprietary interest in the land. With the *pattedars* and *hissedars*, they constituted the recognised classes of land-holders with proprietary rights in the land.

As time passed, the tenancy problem became complicated because of the question of alienated villages, where even hereditary cultivators were sometimes considered tenants-at-will. The question had become more urgent on account of the large volume of agricultural indebtedness in villages. Thereupon, the Government appointed a Tenancy Committee to investigate and examine the conditions of tenants. The Committee arrived at the conclusion that one-third of the net yield after deducting cost of cultivation, weeding and harvesting, remained with the tenant and two-thirds or even more went to the *pattedar*. Out of the *pattedar's* two-thirds share, half or less, *i.e.*, one-third or less went towards land revenue assessment. Thus, on a rough calculation, after deducting expenses from the gross yield, cost of cultivation, manuring, weeding. harvesting, etc., the net income was divided into three equal parts between the *pattedar*, the tenant and Government demand. The Tenancy Committee came to the conclusion that early steps should be taken to put the tenants on a secure basis. The findings of the Committee set the Government thinking in terms of comprehensive agrarian reforms.

Land Reforms

In the wake of changes brought about in the social and political structure of the society, attempts to regulate tenancy were

taken up in all parts of India, and Hyderabad, which had the Raichur district prior to the States' Re-organisation, was not an exception to it. Several regulations were brought into force and in the course of their implementation innumerable difficulties were experienced. It became clear after all these attempts made to reform the land tenure system that the objectives of reform so far as they related to the problem of absentee landlordism and tenancy should be thoroughly re-examined and reformulated. A new method of approach to the question was urgently called for. Experts in the field found that future legislation should be curative and not palliative as it was before. Any amount of tenancy legislation, so long as the cause of tenancy remained, would deny the real security of tenure to the cultivator. In other words, it was felt that peasants who actually tilled the soil should be the proprietors. It was visualised that a new class of 'peasant proprietors' should manage the land and produce from it abundant food. The main theme of the agrarian reforms was to eliminate all intermediaries between the cultivator and the State. Absentee landlordism was found to be a great hindrance and so it was decided to do away with it. The Agrarian Reforms Committee (1949), in its report, emphasised the point in these memorable words: "So long as the dissociation of or divorce between the ownership of land and the cultivation of it, resulting in the stratification of the society into two classes, landlords and tenants, with ever-conflicting interests, is there, there can never be the atmosphere of peace and security to the cultivator, to inspire him to a better and more efficient utilisation of the land and greater agricultural production, the two crying needs of the day. The objective of any further reform measures should therefore be the elimination of absentee landlordism and tenancy by making ownership of land and cultivation of it coincide with each other."

Public opinion

Public opinion in various parts of India gave ample support to the idea that there could never be real security of tenure to the tenant or real incentive to him for efficient cultivation of land as long as the ownership of the land did not reside in him, and therefore, the tenancy problem should be attempted to be solved by the elimination of all intermediary interests in land between the cultivator and the State. Based on the experience of the various measures, the opinion veered round to the view that any measure of reform in relation to tenancy, should no longer seek to regulate the tenancy system by conferring some rights or further rights on the tenants but should be directed towards providing facilities to the tenant to become the owner of the land he cultivated, by purchase, at a price deemed reasonable by the Government. This reorientated objective of reform in respect of the solution of the tenancy problem was reflected in the views expressed by almost all the committees which, in the recent past, investigated into the land problems in the various States in India beginning with the Bengal Land Revenue Committee of 1940.

The first step in the direction of land reforms in the Hyderabad State was taken in 1933 when a Regulation was passed for preventing agricultural land from passing into the hands of money-lenders and others. In the same year, an officer was appointed to conduct a detailed survey of agricultural indebtedness. One of his findings was that "people from all walks of life began acquiring land, not for purposes of cultivation by themselves, but as a source of business or commercial investment." The Government then enforced the Prevention of Agricultural Land Alienation Act of 1939 in the whole State. This legislation closely resembled the Punjab Land Alienation Act of 1900. Land transfers were prevented unless the transferee belonged to the class of agriculturists as defined by the Act and land with an assesment of Rs. 50 at least was left with the transferer. Those holding land with an assessment of more than Rs. 500 were not deemed to be agriculturists.

A Tenancy Committee was appointed during 1939 and in the light of its recommendation, the *Asami-Shikmis* Act of 1945 was promulgated. The tenants, however, could not derive any benefit from this legislation as its enforcement was half-hearted. According to the Act, *Asami-Shikmidars* could be deemed to be *shikmidars* after 12 years of continuous possession but in practice it was difficult for tenants to prove such a period of continuous possession. The troubles and complaints of the cultivating class continued as before.

Hyderabad Tenancy Act, 1950

After the Police Action in 1948, the Government took up the question again and appointed an Agrarian Reforms Committee in 1949 under the chairmanship of Shri N. Madhava Rao, a former Dewan of Mysore. On the basis of its recommendations, the Hyderabad Tenancy and Agricultural Lands Act, 1950, was adopted. The main objectives of this Act were to improve the status of tenants, to impose a limit on the size of holdings, to abolish landlordism and to encourage retention of lands in the hands of genuine agriculturists. Later, the recommendations of the Planning Commission in the First Five-Year Plan were incorporated in this Act. The Planning Commission suggested a transformation in land tenures in such a way as to help reconciliation of conflicting interests within the agrarian economy, to remove the existing disparities and provide a social and economic framewrok for a balanced growth of village economy. Legislation had, therefore, to be enacted with the basic aims of abolition of all intermediaries between the Government and the tiller of the soil and conferment of rights of proprietorship on the occupancy tenants. Two broad principles that were accepted related to (1) an absolute limit to the extent of land which any individual might hold and (2) that the cultivation and management of land held by an individual owner should conform to standards of efficiency to be determined by law.

The Hyderabad Tenancy and Agricultural Lands Act which was enforced in June 1950 aimed at assuring security of tenure for the tenants and promotion of peasant proprietorship. The salient objectives of the Act were the introduction of the family-holding as a yardstick for administration of land reforms, reduction of rents and their fixation in terms of multiples of land revenue, restrictions on resumption of land for personal cultivation, fixation of ceiling on the size of holdings for future acquisition of lands as well as existing lands, sale of lands in favour of tenants on easier terms and assumption of management or acquisition by the State of surplus or inefficiently cultivated lands.

The Act defined the "family-holding" as the area which a family of five persons, including the agriculturist himself, cultivated personally according to local conditions and practices, and with such assistance as was customary in agricultural operations and which area yielded annually a produce, the value of which, after deducting fifty per cent thereform towards cost of cultivation, was Rs. 800 according to the price levels prevailing at the time of determination. The extent of the family-holding as envisaged ranged from 21 to 36 acres of black cotton soil, from 6 to 9 acres of wet land under irrigation and from 48 to 72 acres of poor lands. The area of a basic holding was equal to one-third of the area of a family holding.

Protected tenants

The privileges of protected tenancy did not extend to tenancies created after 1950. The majority of tenants holding lands on lease from substantial holders in 1954 were found to lack protection under the law because they were ordinary tenants to whom land was leased out by landholders in order to circumvent the effect of the land reforms legislation. The Tenancy Act was, therefore, amended under which ordinary tenants whose owner's holding exceeded three family-holdings were declared as protected tenants.

How the law worked : The process of voluntary purchase of lands by the protected tenants was, however, not very brisk due to various factors. Although, according to tenancy records, the number of protected tenants in the whole of former Hyderabad State was 6,20,000, only 13,000 of them purchased 1,41,000 acres upto the end of 1955. The sale in most of these cases was effected with the consent of the landholders and the protected tenants did not insist on paying a reasonable price. Instead, they paid at market rates. Some of them, however, yielded to the pressure of landholders and surrendered their rights. The Government's policy was to facilitate transfer of land-ownership to tenants. They had, therefore, to take special measure to accelerate the transfer of ownership and to consolidate the position of protected tenants. Areas were selected for the strict enforcement of the Act under which the ownership of all lands held by the protected

tenants stood transferred and vested in the protected tenants. It was presumed under the Act that the tenant already held 60 per cent of the interest in the land and what remained to be purchased was 40 per cent. The transfer of ownership was effected under Government's authority and the tenant was given a certificate that was conclusive evidence of his having become the owner of the land against all other persons.

The Tenancy Act of 1950 made ample provision for prevention of fragmentation and consolidation of holdings. It laid down that no land should be permanently alienated, leased or sub-divided so as to create a fragment. The Government had powers to prepare a scheme for consolidation of land-holdings and to enforce it in areas previously notified.

Land commission

In order to fully associate public opinion with the implementation of land reforms, the Government appointed a Land Commission consisting of three elected, one official and three nominated members. After touring the State extensively and carrying out enquiries for four and a half months, the Commission submitted a report on the determination of family-holdings and local areas and the Government accepted the recommendations of the Commission and issued a notification specifying the local areas in all the districts and the extent of family-holdings for different classes of lands in those areas. The second report of the Commission was on consolidation of holdings. The Government accepted also the recommendations of the Commission regarding consolidation of holdings and action was initiated in 125 villages, to start with, at the rate of 25 villages in each of the five selected districts including Raichur.

Although the Agrarian Reforms Committee, 1949, had recommended consolidation, as far as possible, by voluntary methods through co-operative agencies, the Land Commission suggested that as the work was highly technical and required considerable knowledge of settlement and land records work, it should be started through departmental agencies only. The schemes had to be enforced with benevolent compulsion for which ample provision existed in the Tenancy Act.

The Hyderabad Tenancy and Agricultural Lands Act, 1950, had another distinguishable feature, namely, the use of compulsion for the formation of co-operative farming societies. If an application was made to the Registrar of Co-operative Societies, by any ten or more persons of a village or two or more contiguous villages holding between them 50 acres or more for the formation of a co-operative farming society, the Registrar had to make enquiries and grant a certificate of registration.

Amending Act

In the light of experience gained, the Act of 1950 (Hyderabad Tenancy and Agricultural Lands Act) was amended by the Amending Acts XIII and XXIII of 1951. These aimed at improving the status of tenants of lands in *ijara* villages. After the expiry of the term, the lease-holders were recognised as raiyatwari holders on concessional land revenue assessment. With the object of stopping large-scale eviction of tenants, in which the land-holders started indulging, the Hyderabad Prevention of Evictions Ordinance was promulgated in 1952 for staying all suits claiming relief through eviction of tenants and for restoring possession of tenants evicted after 21st March 1952. Sales of lands which were made wihout giving first an option to the protected tenants for purchasing the lands were declared void. The ordinance, however, lapsed in January 1953.

Meanwhile, the Planning Commission made recommendations for further progressive measures to be taken in regard to land policy. Between 1951-52 and 1952-53, tenancy records were prepared for all the villages of the State to consolidate the position of the protected and ordinary tenants. In order further to improve the status of tenants and to provide for the implementation of the recommendations of the Planning Commission, the Hyderabad Tenancy and Agricultural Land Amending Act, 1954, was passed.

After the States' Re-organisation in November 1956, when the district of Raichur was integrated in the new Mysore State, an ordinance was issued on 11th March 1957 suspending the provisions relating to the landholder's right to terminate protected tenancy and also staying all proceedings whether for termination of tenancy or for resumption of land which were pending on 11th March 1957. Surrenders of lands were required to be verified before the Tahsildar and registered in his office. The ordinance also contained a provision that all the lands surrendered by a tenant in excess over the extent which, along with the extent already in the holding of the landlord would make up three family-holdings, should be taken under Government management and leased out to co-operative farming societies, agricultural labourers, landless persons and other agriculturists, in that order. This ordinance was replaced by the Hyderabad Tenancy Suspension of Provisions and Amendment Act, 1957.

In order to have a comprehensive legislation for the whole State of Mysore, the Mysore Tenancy Agricultural Land Laws Committee was set up by the Mysore Government on 10th May 1957 to examine the existing tenancy and agricultural land laws in the various parts and to make suitable recommendations for legislation. The Committee went into the question of fixation of rent, security of tenure, right of resumption of land by land-owners for personal cultivation, right of purchase by tenants and

payment of compensation by landlords, ceiling on land-holdings and other cognate matters. The Chairman, Shri B. D. Jatti, and members of the Committee visited all the districts of the State and heard the views of representatives of various interests. They had also discussions with the local revenue officers who were entrusted with the administration of tenancy laws. The Committee visited Raichur on 2nd August 1957 and besides getting the views of the ryots in the headquarters, visited also Sindhanur, Gangavati and Koppal. The Committee submitted its report to the Government in 1958. According to this report, a total area of 30,27,030 acres of land in the district was held by 1,95,912 land-owners. A table showing the detailed break-up of these figures is given in Chapter-IV.

The Government introduced a Bill called the Mysore Land Reforms Bill, 1958, in the Mysore Legislature. The Bill was referred to a Joint Select Committee of both the Houses, consisting of 46 members. This Committee also heard witnesses and considered a number of representations, comments and memoranda and the views of the Planning Commission. In the light of these and keeping in view the discussions that had taken place in the Mysore Legislature, the Joint Select Committee re-examined the provisions of the Bill and submitted its report in March 1961. The report was discussed and the Bill was adopted by the State Legislature in November 1961 and it received the assent of the President of India on 5th March 1962. However, as it was found to be necessary to amend certain provisions of the Act, its implementation was held up for some time. It was accordingly amended in 1965 by Act No. XIV of 1965.

Mysore Land Reforms Act, 1961

The Mysore Land Reforms Act, 1961 (Mysore Act X of 1962), as amended in 1965, which came into force throughout the State with effect from the 2nd October 1965, the Gandhi Jayanti day, is a highly important piece of legislation in the State relating to agrarian reforms. The enactment has made comprehensive provisions in respect of tenants' rights, ceiling limits of present holdings and future acquisitions, payment of compensation for surplus lands taken over from the land-owners and other connected matters.

Under the provisions of the Act, no tenancy can be terminated merely on the ground that its duration, whether by agreement or otherwise, has expired. Tenants who were cultivating lands prior to 10th September 1957, but who had been dispossessed either by surrender or eviction, are entitled for restoration of possession. Eviction of tenants can only be done in accordance with Section 22 of the Act. Land leased to permanent tenants or those leased by a company, association or other body of individuals (not being a joint family), whether incorporated or

not, or by a religious, charitable or other institution capable of holding property cannot be resumed.

From the date of vesting, all non-resumable lands leased to tenants would stand transferred to the State Government. Lands in excess of 27 standard acres in the case of existing holdings would be treated as surplus land, which would be vested in the Government. The ceiling area for future holdings has been limited to 18 standard acres. A standard acre means one acre of first class land or an extent equivalent thereto as laid down in the schedule to the Act. The future ceiling would be, therefore, as below :—

Class of land	*Ceiling area (in acres)*
I Class	18
II Class	24
III Class	30
IV Class	36
V Class	72
VI Class	108
VII Class	144

The ceiling provisions do not apply to regimental farm lands or to plantations as defined in the Act. Compensation would be paid for all lands vested in the State at the rates prescribed in the Act. The Act does not apply to lands belonging to or held on lease from the Government or from religious or charitable institutions managed by or under the control of the State Government or from a public trust or a society established for public educational purpose, created or formed before the 18th November 1961, and which was in existence on the 18th July 1965.

The existing tenancies would, however, continue till the resumable and non-resumable lands are determined and resumable lands are resumed by the land-owners under Section 14 of the Act. Under Section 44 of the Act, the Government has to issue a notification declaring the date from which the non-resumable land vests in the Government. This can be done only after the Land Tribunals determine the non-resumable lands. From the date of vesting, all non-resumable lands leased to tenants would stand transferred to the State Government. The surplus lands vested in the State Government are to be granted in the order of preference as indicated below :—

(1) Displaced tenants having no land ;

(2) Landless agriculturists and agricultural labourers ;

(3) Tenants, displaced tenants and owner-cultivators with less than a basic holding ;

(4) Co-operative Farms;

(5) Tenants, displaced tenants and owner-cultivators with less than a family holding; and

(6) Other persons desiring to take up personal cultivation.

It has been also provided that in granting the surplus lands, preference has to be given to the tenant, sub-tenant or other person who, immediately prior to the vesting of the land in the State Government, cultivated the lands. The grantee would have to pay the purchase price to the extent of ten times the average net annual income of the land in question in a lumpsum or in annual instalments not exceeding twenty.

According to Section 2(32) of the Act, a standard acre means one acre of land of the first class or an extent equivalent thereto consisting of any one or more classes of land specified in the following schedule:—

First Class.—Wet land or garden land possessing facilities for assured irrigation where two crops of paddy can be raised in a year.

Second Class.—Wet land or garden land other than first class land possessing facilities for assured irrigation, that is, land in the channel area (*nala pradesha*) where one crop of paddy can be raised in a year.

Third Class.—Wet land or garden land other than that of second class land possessing facilities for irrigation from tanks.

Fourth Class.—Wet land or garden land other than first, second or third class of land irrigated (i) by rain water; (ii) by seepage water from tanks, canals or other sources of water; or (iii) by water lifted from a river or a channel by electrical or mechanical power.

Fifth Class.—Dry land or garden land not falling under the first, second, third or fourth class in areas in which the average annual rainfall is more than thirty-five inches or dry-*cum*-wet land or dry garden land, that is, light irrigated dry land or garden land.

Sixth Class.—Dry land or garden land not falling under the first, second, third, fourth or fifth class in areas in which the average annual rainfall is not more than thirty-five inches and is not less than twenty-five inches.

Seventh Class.—Dry land or garden land not falling under the first, second, third, fourth, fifth or sixth class in areas in which

the average annual rainfall is less than twenty-five inches or uncultivable dry land in areas in which the average annual rainfall is not less than seventy-five inches.

The formula for determining the equivalent extent of land of different classes is as follows: One acre of first class land equals one and one-third acres of second class, one and two-thirds acres of third class, two acres of fourth class, four acres of fifth class, six acres of sixth class and eight acres of seventh class.

A Commissioner of Land Reforms has been appointed recently with a view to co-ordinating and expediting the work of implementing the land reforms. Judicial officers of the rank of Munsiff have been appointed to perform the functions of a tribunal. Besides, all the Munsiffs' courts in the State are also required to deal with cases falling under this Act. The appellate authority is the District Judge. Any question of law is to be decided by the High Court of Mysore.

Prevention of fragmentation

In order to remedy the excessive fragmentation of lands which has taken place on account of the law of succession or the economic necessities of the parties, a uniform measure to consolidate the holdings and preventing further fragmentation of lands called the Mysore Prevention of Fragmentation and Consolidation of Holdings Act, 1964, was adopted. According to this Act, a holding of land of lesser extent than the appropriate standard area, determined under Section (3) of the Act, which is not profitable for cultivation, is considered a fragment. The unit of standard minimum area varies from half an acre to four acres according to the classification of lands. Any unit of land which has an area less than this is regarded as a fragment. No person can dispose of such a fragment to any one other than the contiguous holder. No fragment shall be divided or partitioned according to the provisions of the Act.

In addition, the Act also provides for the consolidation of holdings in respect of the existing fragments. In the scheme of consolidation, there is provision for payment of compensation to the owner. Every person, to whom a holding is allotted according to the consolidation scheme, gets a certificate of transfer without any stamp duty or registration fee.

Bhoodan

The voluntary land-gift movement launched in the country by Acharya Vinoba Bhave has not, however, made much headway in the district. According to the details furnished by the Chief Executive Officer, Mysore Bhoodan Yagna Board, 49 persons have donated lands to the extent of about 647 acres in only three taluks of the district. The taluk-wise details of lands donated are given in the following statement :—

Sl. No.	Name of taluk		Extents of lands donated (in acres and guntas)			Number of donors
			Wet	Dry	Total	
1.	Koppal	.. ..	12-25	206-28	219-13	16
2.	Kushtagi	.. ..	..	7-02	7-02	2
3.	Yelburga	.. ..	..	421-12	421-12	31
	Total	..	12-25	635-02	647-27	49

Out of the total extent of 647 acres and 27 guntas gifted, only 48 acres had been distributed among 19 landless families in Koppal taluk upto May 1969. Efforts are also being made to regularise all the *danapatras* under the provisions of the Act. In order to remedy certain defects in the transfer of lands to the grantees under the Bhoodan movement, the Mysore Bhoodan Act, 1963, was enacted in the State.

OTHER TAXES

State Excise

Prohibition was not in force in the district of Raichur. The Excise Department in the district is responsible for the administration of the Opium Act, 1879, the Dangerous Drugs Act, 1930, and the Abkari Act. This Department is under the administrative control of the State Excise Commissioner through the Deputy Commissioner of the district. The District Excise Officer has to inspect the toddy and arrack shops. He is also empowered to issue licences for taverns.

According to the figures furnished by the District Excise Officer, Raichur, there were six foreign liquor shops in the district in 1966-67. The number of such shops had gone up to 19 by the end of 1968-69. The number of toddy shops including arrack shops was 541 in 1966-67 and this had increased to 559 by the end of 1968-69. There were also 29 spiritious medicines licence-holders in the district. The total excise revenue collected including duty, rental, arrears and licence fees, etc., in 1966-67 was Rs. 53,49,289.29. This had increased to Rs. 61,86,302.78 in 1967-68, and to Rs. 87,52,572.65 in 1968-69. The flying squad located in Raichur town detected 609 cases in the year 1968-69, which yielded an additional revenue of Rs. 6,691.78.

Registration and Stamps

Under the Hyderabad Registration Act, 1888, a separate department called the Department of Registration was established in the State. This department was placed under the control of the High Court. In 1896, the work of registration was separated from judicial officers and placed under an Inspector-General of Registration. In 1898 registrars and sub-registrars were appointed for

the districts. Subsequently, the Department of Registration was amalgamated with the Stamps Department. A Stamp Act was enforced throughout the erstwhile Hyderabd State with effect from 1872. In 1915, the judicial and documentary stamps were separated and court fee stamps valued from one anna to Rs. 9 were issued. During the same year, receipt stamps as well as a combined stamp for revenue and postage were also introduced. Again, in 1916, the distinctive separate stamp paper for *serf-e-khas mubarak* was abolished and in its place the use of ordinary stamps was enforced.

In order to prevent frauds in the execution of deeds, stamp papers were issued which mentioned the date of sale and the name of the purchaser. The Department conducted periodical inspections of the district offices in order to see that the provisions of the Stamp Act were strictly adhered to. The total receipts realised from the documents registered and the properties transferred in 1941 in the district of Raichur were Rs. 35,784 (in O.S. currency). The district of Raichur was the third largest revenue yielding district in this respect in the erstwhile Hyderabad State.

In 1961-62, the total revenue realised from the registration of documents was Rs. 81 181.39, whereas it had increased to Rs. 2,63,104.85 in 1967-68. While the number of documents registered in 1961-62 was only 3,571, it had increased to as many as 15,225 in 1967-68.

The Indian Stamp Act, 1955, was made applicable to the entire State of new Mysore in 1956 and the Inspector-General of Registration and Commissioner of Stamps was made the competent authority to exercise the functions of the chief controlling revenue authority under the Indian Stamp Act and the Hyderabad Stamp Act, 1335 Fasli (1926). The uniform Mysore Stamp Act and Rules were brought into force in the district in 1965. In recent years, there has been a remarkable increase in the stamp revenue of the district. According to the figures furnished by the District Treasury Officer, Raichur, the total receipts from the sale of stamps in 1964-65 were Rs. 7,16 262.25 and this had gone up to Rs. 20,19,499.39 in 1968-69. The details of the sale of stamps for the past five years from 1964-65 to 1968-69 are given in the following statement :—

Particulars of revenue realised from the sale of stamps in Raichur district from 1964-65 to 1968-69

Sl. No.	Year	Non-judicial stamp	Court-fee stamp	Revenue receipt stamp	Copying sheet	Special adhesive stamp	Total
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1.	1964-65	5,31,656.00	1,33,031.75	51,574.50	..	..	7,16,262.25
2.	1965-66	12,69,779.25	1,46,019.07	58,555.50	..	496.00	14,74,849.82
3.	1966-67	9,50,561.00	1,72,586.50	78,729.50	..	23.00	12,01,900.00
4.	1967-68	18,82,387.00	1,62,052.12	1,02,052.00	5,075.00	1,432.50	21,53,518.62
5.	1968-69	17,89,177.60	1,40,263.94	82,626.10	7,386.75	45.00	20,19,499.39

The levy of sales-tax is administered by the Commercial Taxes Department. The licence-holders and registered dealers are *de facto* collectors of sales-tax revenue from the public on behalf of the Government. Every dealer whose turnover exceeded Rs. 7,500 was required to get himself registered under the Act. This limit was raised to Rs. 10,000 from the 1st April 1966. The Mysore Sales-Tax Act of 1957 mentions a number of articles taxed and lists them under four schedules. The rate of tax varies according to the category of the commodity in question. In general, the tax rates on the luxury articles are higher. There are about 36 types of articles which are exempted from the sales-tax levy.

Sales-Tax

According to the figures furnished by the Deputy Commissioner of Commercial Taxes, Bellary, the number of registered dealers in the district was 1,161 in 1957-58. This number had more than doubled to 2,757 by 1968-69. In the same way, the gross turnover of the registered dealers, which was Rs. 13,66,13,945 in 1956-57, had increased to Rs. 1,32,37,84,124 by 1968-69. A major portion of the tax realised comes from the Raichur area. The following figures of collection relate to the year 1967-68 :—

		Rs.
1.	Commercial Tax Office, Raichur	44,12,339
2.	Asst. Commercial Tax Office, Raichur	2,09,088
3.	Commercial Tax Office, Gangavati	14,03,512
4.	Asst. Commercial Tax Office, Gangavati	1,42,613
5.	Asst. Commercial Tax Office, Koppal	1,31,738
	Total ..	62,99,290

Coming to the revenue realised under all Commercial Tax Acts including the State Sales-Tax Act and the Central Sales-Tax Act administered by the Commercial Taxes Department, it is noticed that there has been a remarkable increase. In 1957-58, the revenue realised was Rs. 10,18,920. Over a period of ten years, this revenue had increased to more than seven times. The gradual increase in the revenue collections can be seen from the following figures :—

Year	*Revenue realised*	*Year*	*Revenue realised*
1957—58	.. 10,18,920	1963—64	.. 22,16,241
1958—59	.. 10,32,939	1964—65	.. 28,73,513
1959—60	.. 9,85,793	1965—66	.. 47,10,047
1960—61	.. 16,35,293	1966—67	.. 66,01,756
1961—62	.. 17,15,437	1967—68	.. 62,99,290
1962—63	.. 17,94,643	1968—69	.. 74,70,156

Motor Vehicles Tax

The revenue realised from motor vehicles in the form of fees, tax and other receipts has been also increasing as disclosed by the following figures relating to the years 1958-59, 1962-63 and 1968-69 :—

Item	1958—59	1962—63	1968—69
	Rs.	Rs.	Rs.
Fees			
1. Driving and Conductors' licences	4,216	4,629	12,062
2. Registration	1,301	1,183	10,126
3. Brake Certificate	4,468	5,524	23,840
4. Permit	13,939	6,530	12,268
Taxes			
Vehicles and service taxes ..	4,25,089	7,74,073	12,50,086
Other receipts :			
1. Motor Vehicles Tax (other taxes) ..	1,518	1,781	42,237
2. T.P.G.	..	67,676	2,68,725
Total ..	4,50,501	8,61,396	16,19,344

(The tax collected in respect of motor spirits is included under sales-tax).

Agricultural Income-Tax

The Mysore Agricultural Income-Tax Act, 1957, provides for levy of agricultural income-tax at slab rates on all agricultural income derived from land on which commercial crops are grown. Commercial crops include areca, coconut, coriander, cotton, *ganja*, garlic, ginger, grapes, groundnut, mango, mulberry, onion, plantain (irrigated), potato, sesamum, sugarcane, tobacco and turmeric in addition to several plantation crops. The cultivator has to pay the tax according to the slab rate if his income exceeds Rs. 3,500 in the case of an individual or Rs. 7,000 in the case of a joint family having at least two co-partners entitled to claim a partition. Cotton or groundnut grown in an area of 150 acres and below of the last class of land is exempted from taxation. The figures pertaining to agricultural income-tax in the district of Raichur for the years 1961-62 to 1968-69 are given below :—

Year		*Demand*	*Collection*	*Balance*
		Rs. P.	Rs. P.	Rs. P.
1961-62	..	1,47,416.19	58,485.97	88,928.22
1962-63	..	1,00,433.45	34,024.58	66,413.87
1963-64	..	1,20,974.09	50,378.66	90,395.43
1964-65	..	43,493.00	39,130.08	4,362.92
1965-66	..	1,03,066.55	49,022.90	54,043.65
1966-67	..	54,693.65	12,828.81	41,864.84
1967-68	..	42,005.34	4,987.35	37,017.99
1968-69	..	37,425.99	1,413.45	36,012.54

Income-Tax

For purposes of collection of income-tax, there are two Income-Tax Officers in Raichur district. The appellate jurisdiction vests with the Inspecting Assistant Commissioner of Income-Tax, Dharwar. The number of assessees under income-tax, wealth-tax and gift-tax and the amounts collected under each item during the years 1965-66, 1966-67 and 1967-68 are given below :—

Item	*Year*			*No. of assessees*	*Amount of tax collected*
					Rs.
Income-Tax	1965–66	..	..	2,764	20,82,000
	1966–67	..	..	2,445	25,69,000
	1967–68	..	..	2,604	30,40,000
Wealth-Tax	1965–66	..	..	140	69,000
	1966–67	..	..	143	60,000
	1967–68	..	..	140	50,000
Gift-Tax	1965–66	..	..	18	3,000
	1966–67	..	..	12	3,000
	1967–68	..	..	16	4,000

Central Excise

The Central Excise Act of 1944, was brought into force in the district of Raichur, with effect from 28th February 1944. The commodities on which the Central Excise duty is levied in the district are sugar, sulphuric acid, pulp-board, tobacco, vegetable non-essential oils, matches and cotton fabrics (power-looms). There are, at present, three ranges in the district attending to the work of collection of Central Excise duty. The total Central Excise revenue realised in 1967-68 was Rs. 32.75 lakhs, of which a sum of Rs. 30.9 lakhs was derived from sugar and Rs. 1.1 lakhs from pepper units situated at Munirabad.

CHAPTER XII

LAW, ORDER AND JUSTICE

During earlier period

DURING the time of the Nizams, there were two separate police forces operating, *viz.*, the Diwani Police and the Jagir Police. While the Diwani Police force was being administered by the State, the Jagirdars and the *Samsthana* Chiefs had their own police force to administer law and order. The latter police force was rather irregular and ill-organised. The Diwani Police in Raichur district had two sub-divisions, one at Raichur and the other at Lingsugur. The police force in the Koppal and Yelburga tahsils, which constituted a jagir, was being administered by Nawab Sir Salar Jung. In Gangavati tahsil, Anegundi was a *Samsthana* and it was under the Raja Saheb of Anegundi and similarly, Gurgunta in Lingsugur tahsil was ruled by the Raja Saheb of Gurgunta and Gadwal *Samsthana* in Gadwal tahsil by the Rani Saheba of Gadwal.

After the Police Action in 1948, the Jagirs and the *Samsthanas* were all amalgamated with the State and their entire police administration was taken over by the Diwani Police. After this amalgamation, four police sub-divisions were created, one each at Raichur, Lingsugur, Koppal and Gadwal consisting of six circles and 33 police stations. At the time of the States' re-organisation on the 1st November 1956, two of the tahsils, namely, Gadwal and Alampur, were merged in Mahaboobnagar district of Andhra Pradesh. The present revenue district of Raichur in Mysore State is divided into three police sub-divisions and six circles and has 28 police stations. In addition to this, there is a District Armed Reserve Force. The Civil Police Force is utilised to maintain law and order generally and to put down crimes. The District Armed Reserve is utilised in cases of emergencies, for escorting prisoners, treasury and *bandobust* duties, etc.

Labour strikes

During recent years, there was labour unrest in some of the industrial and commercial establishments in the district. There was a 41 days' strike by about 80 per cent of the workers of the Hutti Gold Mines at Hutti in September and October 1957. The Hutti Gold Mines has two labour organisations, *viz.*, the Hutti

Gold Mines Kamagar Sangh controlled by the Indian National Trade Union Congress and the Hutti Gold Mines Employees' Association, which is stated to be independent. The Hutti Gold Mines Labour Union, which was a Communist-led organisation, became defunct. Subsequently, the Hutti Gold Mines Employees' Association was formed on 20th November, 1964. At the instance of this Association, about 370 underground workers of the Hutti Gold Mines staged an underground stay-in-strike from 30th November 1964 to 7th December 1964, agitating for proper supply of foodgrains, dearness allowance, grant of bonus, etc.

Again, during the year 1965, there was another underground stay-in-strike between 21st January 1965 and 26th January 1965, when about 320 workers refused to come up to the surface. The General Manager of the Company, accompanied by the Inspector of Mines, Oorgaum, and the Labour Conciliation Officer and the Chief Underground Agent, went underground (into the mine) on 26th January 1965 with a view to bringing about a settlement. But these officers were wrongfully confined between 13.00 and 17.00 hours on that day and it was stated that they were forced to execute a certain agreement. Subsequently, after the officers came up to the surface, a police case was registered and taken up for investigation. The case was sent up for trial in the District and Sessions Court, Raichur, which convicted ten persons to various terms of rigorous imprisonment on 11th December 1967. The agreement, which had been forced to be executed by the management on 26th January 1965, was repudiated, because it had been taken under duress. During the period of the strike, adequate precautionary measures had been taken. Since the 26th January 1965 uptill now, there has been no labour strike at the Hutti Gold Mines.

In the Salar Jung Sugar Factory at Munirabad, which has also two unions, there was some unrest in March 1958, when the workers agitated for enhancement of their wages. The workers of the Munirabad Pulp and Board Factory also went on a hunger-strike in batches from the 1st May 1967 to 27th May 1967. The strike was undertaken against the closure of the factory. It was stated that the Factory had been closed due to financial loss. The workers of the Raichur District Oil Mills, Cotton-Ginning and Pressing Factories Union observed several strikes, carried on agitations, took out processions and held public meetings in 1966, 1968 and 1969, as a protest against the "anti-labour attitude" of the managements. The cartsmen of Raichur town also observed strikes and took out processions in June 1966, urging increase in the loading and unloading charges by the merchants.

Other strikes and protests

The Forum of Public Opinion, Raichur, took out a procession consisting of about 2,000 persons to the Raichur Railway Station on the 24th of June 1966 and stopped the Madras-Bombay mail

train for a few minutes in connection with the Mysore-Maharashtra border agitation. There were similar acts at Munirabad, Ginigera, Koppal, Bhanapur and Bannikoppa Railway Stations by the various party-members and others in connection with the Central Government's decision to appoint another commission on the Mysore-Maharashtra border dispute. Due to the effective police vigilance in all the above agitations, however, no untoward incidents took place.

The students of the Laxmi Venkatesh Desai College, Raichur, and the Gavi-Siddeshwara College, Koppal, organised strikes and processions in 1964 against the increase of college fees by the managements of the institutions and of charges of eatables by the hotel-owners in 1967. On 25th June 1969, the students and many members of the public of Raichur city staged demonstrations and had organised a 'Raichur Bundh' demanding starting of the agro-engineering course at Raichur from 1969. Adequate precautions taken by the police helped to keep the situation under control.

Gruesome murders

On the 14th May 1961, nine persons were slaughtered because of a long-standing enmity, at Bennur in Gangavati taluk. Twelve accused persons in this case were sentenced to life imprisonment. On the 17th of October 1961, there was another gruesome murder of seven persons by shooting by one Bhimangouda of Naregal in Koppal taluk, which was attributed to a family and property dispute, and the murderer was sentenced to death in this case. Severe village party factions resulted in a mass murder of 20 persons including women and children on the 17th February 1964 at Idapnur village in Raichur taluk. The building in which those 20 persons were staying was set fire to and were killed. In this case, 11 persons were sentenced to death and 22 others to life imprisonment. In a few villages like Hire-Myagira, Mushtoor, Hire-Raikumpi and Matmari, which are also faction-ridden, the police have been vigilant and have taken precautions to maintain law and order effectively.

Crimes under Penal Code

The number of crimes under various Sections of the Indian Penal Code between 1964 and 1967 also showed an increase. In 1964, the number of cases reported was 722, and this figure had increased to 755 in the year 1965. Again in 1966, the figure was 843 and the years 1967 and 1968 accounted for 895 and 932 cases, respectively. This upward trend can be said to be due to the increase in population and increasing public trust in the police to whom the affected parties reported the cases with promptness; it has been also stated that some criminals from outside the district have been operating in this district.

Cognisable offences have been classified under six categories for the purpose of investigation and protection under the law. The following table gives the number of crimes according to the above classification for the years 1966, 1967 and 1968 :—

Classes of Crimes	1966	1967	1968
Class I			
Offences against the State, public tranquillity, safety and justice ..	83	107	110
Class II			
Serious offences against person ..	234	221	246
Class III			
Serious offences against person and property or against property only ..	210	210	215
Class IV			
Minor offences against person ..	44	52	74
Class V			
Minor offences against property ..	252	274	252
Class VI			
Other offences not specified above ..	20	31	35
	843	895	932

The above statement discloses that during the year 1968, the number of cognisable offences registered under five classes of crimes (*i.e.,* except class V), showed an increase in the district with an increase in overall total, when compared with the figures of the two previous years. The total number of cases reported under cognisable crimes for the calendar year 1968 was 932, out of which 928 true cases were investigated. After the necessary police investigation, 540 cases were charge-sheeted, out of which 173 ended in conviction and 169 in acquittal. While 220 cases were undetected, the rest were either under investigation or were pending trial. Statements showing the number of cognisable crimes, the nature of crimes, true cases charge-sheeted, convicted, investigated, etc., for the years 1958 and 1968 are appended at the end of the chapter (*vide* tables 1 and 2).

Grave crimes

Out of 38 cases of murder in 1968, almost all were detected. Out of these 38 cases reported, only one case was technical* in nature. In the year 1968, there was a decrease by 13 cases when compared with the figure pertaining to the year 1967, which was 51. Mostly, the murders were due to action on the spur of the moment. Murders owing to village party factions and land disputes showed a decrease in the year 1968, due to the effective preventive action taken by the local police. Out of 37 cases, five were due to sexual jealousy, two for gain, two on account of family disputes, one was an infanticide, three were the results of previous enmity and the rest, *i.e.*, 24 cases, were due to other causes like sudden quarrels, money transactions, etc. Exposure of children and concealment of birth are committed generally by women of questionable character and of suspected chastity. There was one such case in 1968 as against two in the year 1967.

As regards hurts and assaults on the public servants while discharging their legal duties, there has been an increase in their number in the year 1968; 17 such cases were reported, out of which three ended in conviction.

Dacoity and house-breaking

The number of dacoities in 1967 was seven, while in the year 1968, 11 cases of dacoity were reported, out of which nine were detected. As regards robbery, five cases were reported in 1968 as against four in 1967. The number of house-breaking and theft cases reported in 1967 was 168, whereas it had increased to 187 in 1968. Out of these 187 cases in 1968, 54 ended in conviction, five in acquittal, nine were pending trial and 31 cases were under investigation. The main reasons for the increase in such offences were release of known depredators from the jail, criminals from outside operating in the district, economic conditions, etc. The police in the district are taking preventive measures, such as village-patrolling and vigilance, surprise checks on *kedis* and surveillance of strangers. During 1968, there were 107 known habitual offenders on record in the district, as against 84 in 1967.

Other thefts

Cattle thefts are not uncommon where there is abundant cattle wealth. In 1968, 27 cases were reported, out of which 23 cases were charge-sheeted and nine cases ended in conviction. Ordinary thefts are common and out of 138 cases reported to the police during the year, 40 cases ended in conviction, 23 were acquitted, 10 were pending trial and 42 cases were closed. There were also eight pick-pocketing cases reported in 1968. In this connection, the police keep vigilance in places where there is rush of people; policemen are deputed in mufti near bus stands, railway-booking offices, markets and also at important fairs and festivals.

*In this case, the accused, with her children, being dead due to dejection in life, an abated summary was obtained.

Property lost and recovered

The value of property lost and recovered during the years 1966, 1967 and 1968 was as follows :—

Year		Lost	Recovered
		Rs.	Rs.
1958	..	1,31,936.87	28,525.54
1966	..	2,14,505.64	55,351.41
1967	..	2,45,384.37	37,061.38
1968	..	4,10,887.09	43,557.22

The percentage of recovery of stolen property in the year 1968 was lower than that of two previous years. The disposal of a large number of cases pending investigation may increase the percentage, if the cases are detected.

Suicides and Homicides

Three hundred and thirty cases of suicide and 38 cases of homicide were reported to the police in the year 1968. Post-mortems and inquests were held in all these cases. A total of seven cases of attempted suicide were also reported during the same year. Most of such cases could be attributed to domestic unhappiness and poverty. Out of the seven cases, three ended in conviction, one was pending trial and three cases were under investigation.

Accidental deaths

Accidental deaths reported in 1968 numbered 330, the break-up being 14 by snake bites, 149 due to drowning, nine by burns, four by lightning shocks and 154 by miscellaneous causes.

Security cases

As a measure of safety and public orderliness and to maintain peace and tranquillity, security cases under Sections 107, 109 and 110 of the Criminal Procedure Code and also under 96 and 98 of the Mysore Police Act were launched ; the numbers of such cases were as follows : under Section 107 of the Criminal Procedure Code—47 ; under Section 109 of the Criminal Procedure Code—76 ; under Section 110 of the Criminal Procedure Code—20 ; under Section 96 of the Mysore Police Act—189 ; and under Section 98 of the Mysore Police Act—34. Seventy-six cases were booked by the Special Officers (Deputy Superintendents of Police) under the Suppression of Immoral Traffic in Women and Girls Act.

In 1968, the police requested medical officers to conduct 367 post-mortem examinations, these arising out of natural and unnatural deaths. During the same year, totally 112 gambling cases were booked, all of which ended in conviction. There

were also, in all, 35 public nuisance cases. Between 1957 and 1968, 20 untouchability cases were registered and there were three convictions.

During 1968, prosecutions were launched in respect of 540 cognisable offences of various kinds, as against 562 in 1967. Out of 540 cases filed in 1968, 173 cases were convicted, as against 206 in 1967. The percentage of convictions during the year 1968 had gone down. There was, however, a heavy pendency of cases in the courts. The following table gives the number of true cases and the number of cases convicted, giving the percentage of convictions, in 1954 and from 1964 to 1968. The offences mentioned here relate to murder, dacoity, robbery, house-breaking and theft and ordinary theft cases :—

Nature of Crime	*Year*	*True cases*	*Con-victed*	*Percentage of conviction*
Murders ..	1954	49	24	48.9
	1964	42	11	26
	1965	54	7	13
	1966	43	7	16
	1967	51	18	35
	1968	38	..	..
Dacoities ..	1954	17	5	29
	1964	5	1	20
	1965	4	..	..
	1966	7	..	..
	1967	7	2	30
	1968	11	..	..
Robberies ..	1954	18	3	16.6
	1964	3	..	..
	1965	4	..	..
	1966	3	..	..
	1967	4	3	75
	1968	5	..	..
House-breaking and thefts.	1954	255	34	13.3
	1964	147	42	28.6
	1965	130	34	26
	1966	168	49	29
	1967	168	67	39.88
	1968	187	54	30.5
Ordinary thefts ..	1954	191	57	30
	1964	170	108	63
	1965	148	86	58
	1966	156	69	44
	1967	155	75	48
	1968	138	40	29

Traffic control

Traffic control is done by the fixed duty pointsmen at all important locations in Raichur and other towns. There is also a mobile patrolling team moving on bicycles for detecting traffic offences at Raichur. Speed traps are laid in order to check excessive speed of vehicles.

Fire-fighting

There is a fire-fighting unit at Raichur. Formerly, this was attached to the District Police Force and consisted of one Station Officer, one leading fireman, one telephone operator, one store-keeper, six firemen and one servant. It was separated from the District Police Force in 1965 and it is now under the control of the Director of Fire Forces, Bangalore. The present staff of the Fire Station is as follows: One Station Officer, one Assistant Sub-Officer, four leading firemen, two telephone operators, one store-keeper, eighteen firemen, one driver-mechanic, four drivers, two messengers and one servant, numbering, in all, thirty-five.

The fire-fighting vehicles are always kept in readiness to serve in cases of emergency. These are sought after by the members of the public, whenever a fire emergency occurs. The Station Officer, Fire Station, inspects all the cinema theatres in the district before a licence is issued.

District Police set-up

The district of Raichur has three police sub-divisions, with headquarters at Raichur, Lingsugur and Koppal, each under a Deputy Superintendent of Police. There are six circles with their headquarters at Raichur, Lingsugur, Gangavati, Manvi, Koppal and Kushtagi, each under an Inspector of Police. In all, there are 28 police stations in the district as follows :—

RAICHUR TALUK

1. Sadar Bazaar, Raichur Town.
2. Somwarpet, Raichur Town.
3. Raichur-Rural, with an outpost at Yermaras.
4. Yergera

MANVI TALUK

1. Manvi
2. Sirvar
3. Kavital

DEODURG TALUK

1. Deodurg
2. Ramdurg
3. Jalhalli

LINGSUGUR TALUK

1. Lingsugur
2. Mudgal
3. Maski
4. Hutti, with an outpost at Gurgunta.

GANGAVATI TALUK

1. Gangavati, with an outpost at Siddapur.
2. Kanakgiri

SINDHANUR TALUK

1. Sindhanur
2. Turvihal
3. Balganur

KOPPAL TALUK

1. Koppal Town
2. Koppal—Rural
3. Munirabad
4. Alawandi

KUSHTAGI TALUK

1. Kushtagi
2. Tawargera
3. Hanamsagar

YELBURGA TALUK

1. Yelburga
2. Kukuur

Apart from these, there are two Food Check Posts bordering Andhra Pradesh, one at the Krishna Road Bridge under the Raichur Rural Police Station and the other at Kothdoddi under the Yergera Police Station in Raichur taluk.

As a measure to check the smuggling of foodgrains into the other States, the Government of Mysore have sanctioned a special staff consisting of one Sub-Inspector, one Head Constable and three Constables, and the unit is provided with a jeep.

Mobile Squad

There is a Mobile Squad consisting of one Sub-Inspector, one Head Constable and two Constables. A jeep is allotted to this Squad which moves throughout the district and detects cases of contravention of provisions of the Essential Commodities Act and such detected cases are reported to the police stations concerned for investigation and legal action. The Station House Officer sends such reports to the District Superintendent of Police by quickest means and on receipt of such reports, the information is sent to the higher authorities concerned by radio messages.

Police Lock-ups

All police stations have two lock-ups each, one for males and the other for females, except in three police stations, *viz.*, Hutti, Kanakgiri and Munirabad, which have a lock-up each. In all,

there are 53 lock-ups for 28 police stations. These lock-ups are of Hyderabad-type design, except at Sirvar and Alawandi, which have new Mysore-type lock-ups. All these lock-ups are a part of police stations and their doors are fitted with strong iron bars.

There is a Vigilance Section at Raichur which is under the State Vigilance Commission.

Special Branch

The District Special Branch attached to the District Police has to collect information regarding political activities, watch political, communal and labour organisations, check foreigners, verify the character and antecedents of candidates seeking jobs in Government and Government-aided concerns, co-ordinate methods of handling mobs and crowds, assist to make *bandobust* during labour strikes, look after the security of V.I.Ps., help fight natural calamities and attend to interception work relating to letters, etc. The District Special Branch was formerly manned by one Inspector, two Sub-Inspectors, ten Head Constables and eight Constables. But after the re-organisation of the police force during 1959-60, the strength has been reduced to one Sub-Inspector and ten Head Constables.

Intelligence Bureau

There is a District Intelligence Bureau at Raichur. It is functioning with a staff of one Sub-Inspector and four Head Constables, attached to the District Police Office. The Bureau serves as the agency to collect particulars about criminals and crimes and to disseminate the information to police officers in and outside the district. Finger-prints and foot-prints are photographed in house-breaking and theft cases and sent promptly to the Central or State Finger-Print Bureau, Bangalore, for necessary development and enlargement. In certain cases, finger and foot-prints of the offenders are also traced. When suspected poisoning cases are reported, the viscera is sent to the Chemical Examiner, Bangalore. In murder cases, to test the presence of blood, the blood appearing on the clothes, weapons, etc., is sent to the Chemical Examiner.

Remand Home

There is a Remand Home at Raichur with a separate staff, set up with the objective of preventing juvenile delinquency. This Home helps to rehabilitate helpless or socially handicapped young offenders and weans them away from bad means of livelihood. The juveniles are trained in arts and crafts, besides being given elementary general education. (*See* also Chapter XVII).

Reception Centre

A Reception Centre is also functioning at Raichur with a separate staff, which assists in preventing immoral traffic in women and girls. The Centre provides training to destitute women and girls in hosiery work and other crafts, so that they can have employment opportunities. (*See* also Chapter XVII).

Armed Reserve Force

There is a District Armed Reserve Force at Raichur. Formerly, it consisted of one Inspector, two Reserve Sub-Inspectors, 17 Head Constables, 202 Constables and a mechanic. But after the reorganisation of the police force during the year 1959-60, the strength has been fixed at one Inspector, four Reserve Sub-Inspectors, five Assistant Reserve Sub-Inspectors, 29 Head Constables and 169 Constables, including a temporary staff of one Head Constable and four Constables. Twenty-five per cent of this force is always kept as a stand-by to assist in cases of emergency and hence it is called the Emergency Force. Previously, there was a State Reserve Force stationed at Gulbarga to help meet emergencies; it has been now abolished.

District Police Force

The strength of police officers in the district in the gazetted cadre consists of one District Superintendent of Police of the I.P.S. Cadre and three Deputy Superintendents of Police who are in charge of sub-divisions.

The police force of the district, excluding the officers of the gazetted cadre, previously consisted of seven Inspectors, including one C.I.D. Inspector and one Armed Reserve Inspector, 35 Sub-Inspectors, including two C.I.D. Sub-Inspectors and two Reserve Sub-Inspectors, 104 Head Constables, including one Head Constable-Mechanic attached to the District Armed Reserve, and 885 Constables, including 202 Constables of the District Armed Reserve. But with the re-organisation of the police force during the year 1959-60, the District Police Force now consists of seven Inspectors, including one Armed Reserve Inspector, 37 Sub-Inspectors, including one Sub-Inspector attached to the Special Branch, one Sub-Inspector of the Intelligence Bureau, one Sub-Inspector allotted to the Mobile Squad (temporary), two Sub-Inspectors working as Assistant Public Prosecuting Officers, four Reserve Sub-Inspectors and one Assistant Reserve Sub-Inspector attached to the Police Motor Transport Section, 119 Head Constables, including 29 Head Constables of the District Armed Reserve, four Head Constables of the Intelligence Bureau, ten Head Constables of District Special Branch and six temporary Civil Head Constables including those of the Mobile Squad and one temporary Head Constable of the District Armed Reserve. The total strength of the Constables is 789, including 165 of the District Armed Reserve, five temporary Constables of the District Armed Reserve and 12 temporary Civil Police Constables. There are no Jamadars or Daffedars in the Raichur District Police set-up. Apart from the above, there are six law graduates working as Assistant Public Prosecutors attached to courts in the district. They are appointed by the Government in consultation with the District Magistrate (Deputy Commissioner). Their pay and travelling allowances are drawn and paid by the office of the District Superintendent of Police.

Equipment

The armament of the District Police Force in 1969 consisted of 811 rifles of .303 bore, 134 muskets of .410 bore, five rifles of .22 bore, eight C.M.T. revolvers of .45 bore, 37 revolvers of .445 bore, four light pistols, eight pistols of .9 mm., five tear-gas guns (riot guns) and one tear-gas trenchen, besides 16 rifles of .22 bore for training of civilians in rifle-shooting.

The District Police Force have, in all, 22 vehicles, consisting of one station wagon, eleven jeeps, three motor cycles, six vans and one truck, while in 1958, they had, in all, 11 vehicles.

Administrative set-up

The District Superintendent of Police is the head of the District Police Force and is answerable to the Deputy Inspector-General of Police, North-Eastern Range, Gulbarga. The Superintendent of Police is responsible for all matters relating to internal administration, management and discipline of the force. He is competent to transfer the Sub-Inspectors, Assistant Sub-Inspectors, Head Constables and Constables from one place to another within the district. In case of defaults, he can order suspensions upto the rank of Sub-Inspectors.

The Deputy Superintendents of Police are in charge of sub-divisions and are to help the District Superintendent of Police in running the police administration in the district. They are competent to impose minor punishments on Head Constables and Constables of their sub-divisions as per rules.

The Circle Inspectors of Police are responsible for the proper administration of the police circles. They have been made drawing officers since 1960 and are responsible for disbursing the pay and travelling allowances to the staff working in their respective circles and proper maintenance of the accounts. Heinous cases reported in the circles have to be investigated by the Circle Inspectors themselves.

All police stations, circle offices, sub-division offices, out-posts and offices of the Assistant Public Prosecutors in the district are inspected by the District Superintendent of Police about once in a year. The Deputy Superintendents of Police also undertake inspections of the police stations and out-posts and other offices in their respective sub-divisions. Circle Inspectors also undertake inspections of police stations and out-posts in their respective circles twice a year. The inspections are generally conducted from about the beginning of January and completed by the end of September.

There is no police training school or college in the district. The men recruited for the Civil Police are being sent to the Mysore State Police Training School, Channapatna, for their

training, while men recruited for the District Armed Reserve are sent for training to the City Armed Reserve, Bangalore.

The general discipline of the police force has been good and whenever cases of indiscipline are reported, strict action is taken under the Mysore State Police (Disciplinary Proceedings) Rules, 1965.

The total expenditure on the District Police Force was Rs. 22,47,035 in 1968.

Civilian Rifle Training Centre

The members of the public are trained in rifle-shooting at the Civilian Rifle Training Centre at Raichur. There is a proposal to open such centres at all taluk headquarters in the district. In all, 16 rifles of .22 bore have been supplied by the Government for the use of the centre, as already stated. The cost of cartridges fired and membership-fee are collected from the members of the centre. A Reserve Inspector of Police or a Reserve Sub-Inspector of Police is usually deputed for imparting training to the members.

Home Guards

To assist the police in emergencies, a Home Guards Unit and Village Defence Parties have been formed in the district. These are voluntary bodies. There were 68 Home Guards on the rolls of the unit in 1969, functioning under the direction of a Commandant. During the same year, there were Village Defence Parties in 36 villages, which had 656 members.

Village Police

Each village or a group of villages has a Police Patel. He has to collect information about suspicious strangers and convey the same to the police station. He has also to give information to the police about any offence committed in the village and is required to assist the police generally in preventing and detecting crimes in the village.

Annual District Police Sports are held at Raichur during the end of each year, in which athletes from the three sub-divisions participate; they also take part in the State-level sports held in Bangalore in December of every year.

Police welfare

A Welfare Centre for Women and Children is functioning in the new Police Colony, Raichur. Training in tailoring, embroidery and spinning is imparted to members of the policemen's families by an Instructress who is paid from the District Police Benevolent Fund. There are five ambar charkas, one radio and two sewing machines in this centre. There is a proposal for the construction of an independent building for this welfare centre, for which an amount of about Rs. 36,000 has been collected by staging benefit performances.

A New Type Middle School with primary and middle classes is functioning in the Police Colony, with 500 students. A fine new building with ten rooms has been constructed with a Government grant of Rs. 10,000 and by *shramadan* and public contributions. A nursery school is also being run at the welfare centre.

An evening literacy class for illiterate adults of the police constabulary has been started at Raichur and a school teacher deputed by the State Education Department is conducting the class in the evenings. A beautiful temple of Hanuman has been recently built by the District Armed Reserve men with local assistance, as there was no temple anywhere nearby.

Co-operative Society

A Police and other Government Officials' Consumers' Co-operative Society, consisting of 101 share-holders, has been functioning at the Police Headquarters. Foodgrains and other essential commodities are made available for sale at reasonable prices by the Society. Officials of the District Police Office are attending also to the work of this Society on a monthly honorarium. The average sales of the Society amount to about Rs. 20,000 per month. Nearly 500 families of the police and other Government officials are taking advantage of the facility provided by this institution.

Police Clubs

A building for the Police Club, at a cost of about Rs. 45,000, was constructed in 1966 out of funds raised by staging benefit performances and it is well furnished. There is also another recreation club building in the District Armed Reserve lines constructed during 1955 by *shramadan* and public contributions. It is used for recreational activities of the Armed Reserve officers and men. There is another club at the Police Headquarters, meant for youngsters, where physical training is imparted to 40 boys and 30 girls belonging to policemen's families.

Other facilities

A vegetable garden is maintained at the Police Headquarters. Vegetables grown there are sold to policemen at a rate cheaper than the market price. The garden is provided with a well and a pumpset. An area of about 25 acres, which had been lying fallow, has been brought under cultivation by the District Armed Reserve men and a considerable amount has been credited to the Police Benevolent Fund from the sale proceeds of the yields from the garden. Two poultry farms have been opened, one at the District Police Headquarters, Raichur, and another at the Yergera Police Station. The eggs obtained from them are sold to the police personnel. The cost of feeding the fowls is met from the sale-proceeds of the eggs. A hair-cutting saloon and a laundry have also been provided at the District Police Headquarters for the benefit of the policemen.

Jails and Judicial Lock-ups

The origin of the present system of Jail management in the district of Raichur may be said to be dating from 1897, when the then Director-General of Prisons of the Hyderabad State, Mr. Hankin, organised district prisons, wherever possible, and compiled a Jail Manual on which their day-to-day administration was to be carried on. Before that, the department was in a very backward condition. A number of reforms were introduced in the management of prisons during Mr. Hankin's time. Regular hours were set apart for games and a parole system was introduced under which convicts of good behaviour were allowed leave for a few hours in the week when they were permitted to wear their own clothes. A Discharged Prisoners' Aid Society was also established in the district.

District Jail

The District Jail at Raichur is situated near Kati Darwaja, about a mile from the Railway Station, on the main road leading to the city. The Jail building was originally a durbar hall in the Mughal regime and was converetd, in later days, to serve as a prison. It is a very small Jail, consisting of two major barracks for housing convicted and under-trial prisoners. There is also a solitary cell and a hospital ward. The total accommodation sanctioned and provided for in the Jail is for 80 prisoners. The District Jail is intended for confinement of prisoners sentenced to a term of imprisonment of less than a year. Prisoners sentenced to a term of imprisonment of over a year are transferred to the Central Jail at Gulbarga. The majority of prisoners confined in the District Jail are under-trial prisoners, who are either received direct from courts or transferred from mofussil places in the district.

The prisoners have to lift water from the wells, do gardening and other work. In order to keep the prisoners fully occupied, a proposal to start carpentry, cotton tape-making and rattan work has been approved by Government. As a measure of reform, a Panchayat Board, consisting of two under-trial prisoners, has been set up. This Board is required to work for creating a sense of responsibility and self-reliance amongst the prisoners. It is stated to be functioning well.

Recreational and other facilities

Facilities for indoor and outdoor games, such as volley-ball, ring tennis, carom and ludo have been provided for the inmates of the District Jail to make their evenings happy and cheerful. The convicts are encouraged to sing *bhajans* and *lavanis* on sundays and festival days. They are being given special feeding on seven festive occasions in a year, such as the Gandhi Jayanti, Republic Day, Independence Day, Basava Jayanti, etc. The State Information Department exhibits select films about once a month. The films are generally topical and instructive. Part-time adult education classes are conducted in the District

Jail by a teacher deputed for the purpose by the State Education Department. The prisoners lodged in the Jail are permitted to have interviews with their kith and kin and to correspond with them. They are also allowed to buy *beedies* and cigarettes, oil and soap from out of their own funds.

Administrative set-up

The District Jail at Raichur is administered by the Civil Surgeon of the district who is its *ex-officio* Superintendent. He is responsible, insofar as the management of the Jail is concerned, to the Inspector-General of Prisons in Mysore, Bangalore. The Superintendent of the Jail is also required to look after the general hygiene of the prison and the health and welfare of the prisoners. He has under him one Jailor, two Daffedars, a Pharmacist, 18 Warders and other servants. The Jailor is the man on the spot to carry on the day-to-day administration of the Jail. Under the orders of the Superintendent, he has to supervise the work of the whole of the subordinate prison-staff and enforce strict discipline in the Jail premises. The Jail is guarded externally by the police. It is proposed to replace them by prison guards.

Judicial Lock-ups

Apart from the District Jail, which is at Raichur, there are seven Judicial Lock-ups or Sub-Jails situated at Manvi, Kushtagi, Gangavati, Lingsugur, Deodurg, Sindhanur and Koppal, the administration of each of which is under the control of the Sheristedar of the Taluk Office of the place, who is the *ex-officio* Superintendent of the Sub-Jail. He is assisted by a clerk of the Taluk Office styled as Jailor-*cum*-Clerk, Head Constables and Constables. There is no Sub-Jail in Yelburga taluk. In Manvi, Kushtagi, Gangavati and Lingsugur Sub-Jails, there is accommodation for 30 prisoners each, while in Deodurg, Sindhanur and Koppal Sub-Jails, the maximum number of prisoners that can be lodged is 12, 10 and 20, respectively. Only under-trial prisoners and those convicted for a term of a fortnight and below are confined in these Judicial Lock-ups and those sentenced for more than a fortnight are transferred to the District Jail. As these Sub-Jails are mostly for under-trials, who are lodged there for a short duration, no welfare or reformatory measures are introduced in them. The bills of the Sub-Jails have to be countersigned by the District Magistrate of the district.

Administration of Justice

Earlier period

Separation of the judiciary from the executive was first mooted in the erstwhile Hyderabad State in the year 1922 and the principles governing this healthy reform were implemented all over the area. The revenue officers, who were earlier exercising also magisterial powers, were divested of them and Munsiffs were

appointed for each *Diwani* tahsil (taluk), and they were invested with I class magisterial powers on the criminal side. The First Talukdar, the Second Talukdar, the Deputy Collector and the Tahsildar were all given certain powers under the Hyderabad Code of Criminal Procedure for the express purpose of preventing crimes and for the maintenance of law and order. Under the amended Code of Criminal Procedure, which was extended to the Raichur area, the revenue officers ceased to exercise also the limited powers conferred earlier. Orders were passed appointing Collectors as *ex-officio* Additional District Magistrates, Deputy Collectors in charge of the sub-divisions as *ex-officio* I Class Magistrates and Tahsildars as *ex-officio* II Class Magistrates. These officers did not exercise any judicial functions and their powers related mainly to prevention of crimes and efficient maintenance of law and order.

Even now, the revenue officers in this district exercise such powers under the amended and uniform Code of Criminal Procedure of Mysore State, which has been made applicable to all the districts in the State. The State Government have also passed orders appointing Deputy Commissioners as District Magistrates and Assistant Commissioners as Sub-Divisional Magistrates and Tahsildars as Taluk Magistrates. These officers also do not have any judicial functions and their magisterial powers are of an executive nature, pertaining to prevention of crimes and maintenance of law and order.

Previously, for each district in the old Hyderabad State, there was a post of Nazim Adalat Zila who was District Judge and Magistrate. This post was abolished in 1951 and in its place, a post of District and Sessions Judge was created for each district. Similarly, a post of Subordinate Judge-*cum*-District Magistrate was also established for each district during the same year. This Court of Subordinate Judge-*cum*-District Magistrate was functioning in this district till 1964 and, in July 1964, this post was abolished and in its place, a post of Civil Judge (Senior Division) was created at Raichur. Between 1917 and 1948, courts of Munsiff-Magistrates were established in Raichur district at nine places as noted below :—

Sl. No.	*Name of place*		*Year of establishment*
1.	Raichur	..	1326 F (1917 A.D.)
2.	Manvi	..	1331 F (1922 A.D.)
3.	Sindhanur	..	1331 F (1922 A.D.)
4.	Gangavati	..	1331 F (1922 A.D.)
5.	Lingsugur	..	1331 F (1922 A.D.)
6.	Yelburga	..	1331 F (1922 A.D.)
7.	Kushtagi	..	1331 F (1922 A.D.)
8.	Deodurg	..	1331 F (1922 A.D.)
9.	Koppal	..	1357 F (1948 A.D.)

Prior to 1948, the court work in the district was being conducted in Urdu and then the medium was switched over to English. The court libraries have also copies of Urdu law books, Urdu law journals and the Deccan law reports, which are consulted even to-day.

District and Sessions Judge's Court

The District and Sessions Judge at Raichur is the head of the judiciary in the district. He is appointed by the State Government in consultation with the High Court of Mysore. He presides over the District Court in all civil matters and performs also the functions of a Sessions Judge in criminal cases. His administrative powers consist of general superintendence and authority over the judiciary within the confines of the district. He has been invested with necessary powers to appoint Head Munshies of the Munsiff-Magistrates' Courts, I Division Clerks, II Division Clerks and menial staff and impose penalties in cases of indiscipline. He has to periodically inspect the subordinate courts in the district.

In his judicial capacity, he acts as an appellate authority over the judgments of the lower courts, both civil and criminal. In addition, he has to scrutinise the judgments of all judicial officers working under him. Renewal of Pleadership *Sanads* is sanctioned by him. He also investigates complaints brought against gazetted and non-gazetted officers of the judiciary in the district. He has to submit periodical statistical returns to the High Court.

After the enforcement of Civil Courts' Act, 1964, the District Judge does not try original civil suits; only appeals from the decrees and orders passed by the Civil Judge, having a pecuniary jurisdiction of below Rs. 20,000 and above Rs. 5,000 are brought to him for disposal. In other civil cases, appeals from the Civil Judge's Court lie direct to the High Court.

As a Sessions Judge, he presides and disposes of cases committed to him under the Criminal Procedure Code and sits as an appellate authority over the judgments of the Magistrates' Courts. The Sessions Judge can hold his Sessions Court anywhere in the district, subject to the approval of the High Court. He has been specially empowered to try cases under the Anti-Corruption Act; for the trial of such cases, he has been designated as Special Judge and appointed as such.

Civil Judge's Court

The Civil Judge's Court at Raichur has jurisdiction over all the revenue taluks of the district and has appellate jurisdiction over the decisions of all the Munsiffs in the district. The Civil Judge has unlimited original jurisdiction over civil suits valued above Rs. 10,000. The Civil Judges are appointed by the High Court by promotion from the cadre of Munsiffs.

Munsiff-Magistrates' Courts

There are Munsiff-Magistrates' courts in all the taluk headquarters in the district. They have both civil and criminal jurisdictions. As Munsiffs, they have civil powers to entertain all original suits and proceedings upto the value of Rs. 10,000 only. As Magistrates, on the criminal side, they exercise powers of a I Class Magistrate under the Criminal Procedure Code within the territorial jurisdiction of the taluk. All the courts of the Munsiff-Magistrates in the district are also Juvenile Courts and have been empowered to try cases under the Children's Act. The Munsiff-Magistrates are responsible to the District and Sessions Judge in all administrative matters. They are appointed by the Governor in accordance with the Mysore Munsiffs' Recruitment Rules, 1958, in consultation with the State Public Service Commission and the High Court.

A perusal of the records of the Civil Courts in the district reveals that, in the main, property disputes, partition suits, declaratory suits, pecuniary and fiscal cases, mortgage disputes, succession and adoption cases are filed and disposed of in these courts.

Five statements, one showing the total number of cases, both civil and criminal, decided by the various courts in the district, as also their receipts and charges, during the year 1966-67, and the other four showing the number of cases pending at the beginning of the years 1967-68 and 1968-69, the number of cases instituted during the years, the number of cases disposed of and the closing balance of cases at the end of the years in the various civil and criminal courts in the district, as also their receipts and charges for the years, are enclosed at the end of the chapter (*vide* tables 3 to 7).

Bar Associations

The district headquarters as also all the taluk headquarters in the district have Bar Associations, the membership of which is open to all legal practitioners. The Bar Association at Raichur has a good library with a reading room. It was established more than 50 years ago. As in February 1969, the number of lawyears practising at Raichur was 60.

TABLE 1

Statement showing the number of cognisable crimes, nature of crimes, true cases charge-sheeted, investigated, etc., in Raichur district for the year 1958.

Sl. No.	*Nature of Offences*	*Reported*	*True cases investigated*	*Charge-sheeted*	*Convicted*	*Acquitted or discharged*	*Pending trial*	*Undetected*	*Under investigation*
1	2	3	4	5	6	7	8	9	10
1.	Murder ..	42	42	22	2	1	19	7	13
2.	Culpable homicide ..	..	..	..	..	..	..	..	..
3.	304-A, I. P. C. ..	8	8	8	1	3	4	..	..
4.	Dacoity ..	7	5	1	..	..	1	3	2
5.	Robbery ..	8	5	2	1	1	..	2	1
6.	House-breaking and thefts by day. ..	18	18	8	5	1	2	3	7
7.	House-breaking and thefts by night (including attempts).	163	163	29	17	2	10	52	82
8.	Thefts (including below Rs. 5).	137	137	50	28	16	6	38	40
9.	Cattle thefts ..	14	14	8	2	1	5	..	6
10.	Rioting ..	49	49	36	5	3	18	6	17

Table 1 (*contd.*)

1	2	3	4	5	6	7	8	9	10
11.	Kidnapping and abduction ..	4	4	1	..	1	..	2	1
12.	Cheating ..	1	1	..	..	..	..	..	1
13.	Criminal breach of trust ..	22	22	10	1	1	8	1	11
14.	Offences relating *to* coins and currency and Bank Notes.	..	..	..	..	..	..	..	..
15.	Other cognisable cases	330	330	151	64	22	65	44	135
	Total ..	803	798	326	126	52	138	158	316 (4 cases were false)

(I.P.C. =Indian Penal Code; H. B. T. =House Breaking and Theft).

TABLE 2

Statement showing the number of cognisable crimes, nature of crimes, true cases charge-sheeted, investigated, etc., in Raichur district for the year 1968.

Sl. No.	Nature of Offence	Reported	True cases investigated	Charge-sheeted	Convicted	Acquitted or discharged	Pending trial	Undetected	Under investigation
1	2	3	4	5	6	7	8	9	10
1.	Murder ..	38	38	26	..	1	25	6	5
2.	Culpable homicide ..	1	1	1	..	..	1	..	..
3.	304-A, I. P. C. ..	28	28	19	6	9	4	6	3
4.	Dacoity ..	11	11	6	..	..	6	3	2
5.	Robbery ..	5	5	1	..	..	1	1	3
6.	House-breaking and thefts by day	26	26	18	15	3	..	6	2
7.	House-breaking and thefts by night (including attempts).	161	161	50	39	2	9	82	29
8.	Thefts (including below Rs. 5)	138	135	73	40	23	10	42	19
9.	Cattle thefts ..	27	26	23	9	5	9	1	2
10.	Rioting ..	103	103	72	2	26	44	16	15

Table 2 (*contd.*)

1	2	3	4	5	6	7	8	9	10
11.	Kidnapping and abduction	4	4	1	..	..	1	..	3
12.	Cheating ..	7	7	2	2	..	..	2	2
13.	Criminal breach of trust	24	24	4	1	..	3	3	17
14.	Offences relating to coins and currency and Bank Notes.	2	2	..	..	..	..	2	..
15.	Other-cognisable cases	357	357	244	59	100	85	59	54
	Total ..	932	928	540	173	169	198	229	156 (1 transferred)

TABLE 3

Statement showing the total number of cases decided (Criminal and Civil) by the various courts in Raichur district and their receipts and charges during the year 1966-67

Courts	Original		Appellate		Total Receipts and charges	
	Regular	*Miscellaneous*	*Regular*	*Miscellaneous*	*Receipts*	*Charges*
		CIVIL			Rs. P.	Rs. P.
District Judge's Court	..	34	28	13	8,133.00	86,084.00
Civil Judge's Court	44	30	81	69	53,163.00	56,981.00
Munsiffs' Courts	1,059	487	..	..	63,380.00	1,52,807.00
		CRIMINAL				
Sessions Court	86	33	65	17	89,679.00	4,35,270.00
Magistrates' Courts	6,184	642	..	..	72,554.00	1,52,223.00
	7,373	1,226	174	99	2,86,909.00	8,83,365.00

TABLE 4

Statement showing the number of Civil cases instituted and disposed of in various courts of Raichur district and their receipts and charges during the year 1967-68

Name of Court	Original suits		Small cause suits		Execution cases		Miscellaneous cases		Insolvency cases		Regular appeals		Miscellaneous appeals		Receipts	Charges
	Instituted	Disposed	Instituted	Disposed	Instituted	Disposed	Instituted	Disposed	Instituted	Disposed	Instituted	Disposed	Instituted	Dispose		
															Rs. P.	Rs. P.
District Judge's Court ..	..	..	..	..	..	..	50	45	1	1	1	3	80	28	2,503.00	67,066.00
Civil Judge's Court ..	68	49	..	..	9	13	12	15	..	..	96	76	74	48	30,150.00	42,095.00
Munsiffs' Courts	718	772	26	13	257	257	392	720	..	..	..	..	..	..	70,781.00	1,48,690.00
Total ..	786	821	26	13	266	270	454	780	1	1	97	79	154	76	1,03,434.00	2,77,851.00

TABLE 5

Statement showing the number of Criminal cases instituted and disposed of during the year 1937-53 in the Courts of Raichur district and their receipts and charges for that year.

Name of Court	*Types of cases*	*Number of cases pending in the beginning of the year*	*Number of cases instituted during the year*	*Total for disposal*	*Number of cases disposed of during the year*	*Number of cases pending at the end of the year*	*Receipts*	*Charges*
Sessions Court	(1) Regular ..	52	47	99	52	47	Rs.	Rs.
	(2) Miscellaneous	3	30	33	31	2		
	(3) Revision cases	21	31	52	31	21	5,945.00	..
Magistrates' Courts	(1) Regular ..	427	5,595	6,019 +3**	5,658*	361		
	(2) Miscellaneous	134	839	973	835	138	73,498.00	1,86,606.00
	Total ..	637	6,542	7,179	6,607	569	79,443.00	1,86,606.00

*3,214 by regular trial, 1,732 by summary trial and 712 otherwise.

**Transferred.

TABLE 6

Statement showing the number of Civil Cases instituted and disposed of in various courts of Raichur district and their receipts and charges during the year 1968-69.

Name of Court	Original suits		Small causes suits		Execution cases		Miscellaneous cases		Insolvency cases		Regular appeals		Miscellaneous appeals		Receipts	Charges
	Instituted	Disposed	Instituted	disposed	Instituted	disposed	Instituted	disposed	Instituted	disposed	Instituted	disposed	Instituted	disposed		
															Rs.	Rs.
District Judge's Court	..	..	..	..	..	..	52	51	2	4	1	7	28	62	2,722	51,270
Civil Judge's Court ..	47	45	1	..	6	8	31	21	..	..	84	90	60	83	19,948	52,991
Munsiffs' Courts	623	619	45	43	348	319	365	442	..	..	..	..	..	..	52,201	2,22,530
Total ..	679	664	46	43	354	327	448	514	2	4	85	97	88	145	74,871	3,26,791

TABLE 7

Statement showing the number of Criminal Cases disposed of and pending during the year 1968-69 in the Courts of Raichur district and receipts and charges for that year.

Name of Court	*Type of cases*	*Number of cases pending in the beginning of the year*	*No. of cases instituted during the year*	*Total for disposal*	*Number of cases disposed of during the year*	*No. of cases pending at the end of the year*	*Receipts* Rs.	*Expenditure* Rs.
Sessions Court ..	(1) Regular	47	42	88+1 transferred	41 (40 by regular trial, 1 otherwise)	47		
	(2) Miscellaneous	2	41	43	41	2		
	(3) Revision cases	21	21	42	25	17	347	51,270
Magistrates' Courts	(1) Regular	361	5,955	6,315+1 transferred	5,795*	520		
	(2) Miscellaneous	138	871	1,009	891	118	75,174	2,17,121
Total ..	..	569	6.930	7,499	6.793	704	75.521	2.68,391

*3,356 by regular trial, 1,622 by summary trial and 817 otherwise.

CHAPTER XIII

OTHER DEPARTMENTS

THE functions of some of the important administrative and development departments in the district have been dealt with in some of the earlier and later chapters of this volume. In this chapter, a brief account of the organisational set-up of the various other departments like Agriculture, Animal Husbandry, Co-operation, Industries, Public Works, etc., has been given. The activities of several of these departments, as also the progress achieved by them, have been dealt with in the other relevant chapters; hence mainly their administrative set-up has been explained here.

Agriculture Department

Until a few years ago, all the agricultural development and extension activities in Raichur district were being looked after by a District Agricultural Officer, with the assistance of some technical and ministerial staff. Subsequently, with the extensive development of agriculture in the Tungabhadra ayacut area, the district came to have two District Agricultural Officers, one with headquarters at Raichur and the other at Gangavati. The latter was responsible for development of agriculture in the ayacut area. Both these officers were directly responsible to the Deputy Director of Agriculture of the Division, whose headquarters was also located at Raichur. The Agriculture Department of the State was re-organised in January 1967, when a Senior Class I Officer, *i.e.*, a Deputy Director of Agriculture, was placed at the head of the Agriculture Department in each distict and a Joint Director of Agriculture at the head of each division. Thus, the district of Raichur also came to have a Deputy Director of Agriculture at the district level in place of the above two District Agricultural Officers, whose posts were aboished. Since then, all activities connected with the development of agriculture in the district are under the charge of the Deputy Director of Agriculture, who is directly responsible to the Divisional Joint Dirctor of Agriculture, Raichur.

For purposes of administrative convenience, the district has been divided into three agricultural sub-divisions with head-

quarters at Manvi, Sindhanur and Koppal. Each of these sub-divisions is under the charge of an Assistant Director of Agriculture. While the Manvi Sub-Division consists of Manvi and Deodurg taluks, the Sindhanur Sub-Division consists of Sindhanur, Kushtagi and Lingsugur taluks and the Koppal Sub-Division, Koppal, Gangavati and Yelburga taluks. The taluk of Raichur is, however, looked after directly by the Deputy Director of Agriculture, to whom the Assistant Directors of sub-divisions are subordinate. At the district (*i.e.*, headquarters) level, the Deputy Director of Agriculture is assisted by an Assistant Plant Protection Officer, an Assistant Manure Development Officer, an Assistant Seed Development Officer, an Assistant Agricultural Engineer, a Technical Assistant, two Assistant Agricultural Officers, one for oil-seed development and the other for land reclamation, four Field Assistants, about fifteen members of ministerial staff and an equal number of class IV staff. Each Assistant Director of Agriculture at the sub-divisional level is assisted in his duties by a fairly good number of officials, such as Assistant Agricultural Officers, Field Assistants, Supervisors, Demonstration Maistries, Fieldmen, Watchmen, Mechanics and ministerial and class IV staff. In all, there were about thirty-five Assistant Agricultural Officers including Assistant Agricultural Development Officers, 155 Field Assistants, seven Cotton Supervisors, besides other staff, in the district in 1969. (These do not include the staff attached to the various Research and Training Centres in the district).

There are nine Block Development Officers in the district, one in each full block, and six Deputy Block Development Officers, one in each sub-unit block, and they are also responsible for the implementation of the several agricultural development and extension schemes in their respective blocks with the assistance of the Agricultural Extension Officers and Gramasevaks, who belong to the Agricultural Department. The total number of Agricultural Extension Officers and Gramasevaks in the district in 1969 was 26 and 210, respectively.

For looking after the implementation of the Cotton Development Scheme in the district, there is a Cotton Superintendent at Raichur. He is assisted by a Technical Assistant, a Supervisor and a few field and ministerial staff. He works under the guidance of the Deputy Director of Agriculture, Raichur. There are four Seed Farms in the district, one each at Gangavati, Sindhanur, Turkondana and Guladhalli, and a Seed Processing Unit at Sindhanur, each of which is under the charge of a Manager. These Managers are responsible to the respective Assistant Directors of Agriculture.

Research and Training Centre

There is an Agricultural Research Station at Dhadesugur in Sindhanur taluk. This Centre, run by the State Agricultural

Department, is headed by an Agronomist who is responsible to the Joint Director of Agriculture, Raichur. The Agronomist is assisted in his duties by a Soil Physicist, seven Assistant Agricultural Officers, one Seed Farm Manager, five Field Assistants, a Mechanic, seven Fieldmen and a few members of ministerial staff. There is also a Farmers' Training School at Dhadesugur, which is looked after by a Headmaster, assisted by two Agricultural Instructors, a Horticultural Instructor, one Animal Husbandry Instructor and a few ministerial and class IV officials. A Soil Testing Laboratory has also been established at Dhadesugur, which is headed by an Assistant Soil Chemist. To assist him in his work, there are three Scientific Assistants, two Field Assistants and two Laboratory Keepers, with necessary ministerial and class IV staff. Both the Headmaster of the Farmers' Training School and the Assistant Soil Chemist of the Soil Testing Laboratory are responsible to the Divisional Joint Director of Agriculture. There is another Farmers' Training Centre at Gangavati, established recently, under the charge of a Chief Instructor.

A Gramasevaks' Training Centre has been established at Odderhatti Camp in Gangavati taluk and the same has been upgraded recently. This Centre is headed by a Principal, who is also responsible to the Divisional Joint Director of Agriculture. The Centre may be divided into three wings, the General Wing, the Refresher Course Wing and the Home Science Wing. In the General Wing, there are eight Instructors, one Veterinary Stockman, a Drill-*cum*-Camp Officer, an Artist, a Mechanic, a Carpenter-*cum*-Blacksmith, three drivers and some ministerial and class IV officials. The Refresher Course Wing is headed by an Officer-in-charge-*cum*-Agricultural Instructor, assisted by two Instructors and a clerk and two peons. In the Home Science Wing, there are a Chief Instructress, a Chief Instructor, three Assistant Instructresses, four Instructors and a few ministerial and class IV officials.

To look after the implementation of the oilseeds development scheme in the area, there is an Assistant Oilseeds Development Officer at Raichur. He works under the guidance of the Divisional Joint Director of Agriculture and is assisted in his duties by three ministerial and an equal number of class IV officials.

Agricultural Engineer

There is a Divisional Agricultural Engineer at Sindhanur to help the cultivators insofar as mechanised cultivation is concerned. Being a Divisional Officer, he has jurisdiction over all the four districts of the Gulbarga Division. Since Sindhanur occupies a central place in the Tungabhadra ayacut area, which is witnessing brisk agricultural activities, this office is aptly located here. The Divisional Agricultural Engineer, who works under the general supervision of the Joint Director of Agriculture, Raichur, is assisted in his duties by a number of technical and non-technical

personnel. The sanctioned strength of his establishment includes five Foremen Supervisors, three Mechanics, four Fitters, seven Bulldozer Operators, 52 Tractor Operators, two Motor Truck Drivers, about 20 Tractor Helpers, four Cleaners, a Welder, a Carpenter, a Smith, about ten members of ministerial staff and four watchmen.

Joint Director of Agriculture

As already mentioned earlier, the headquarters of the Divisional Joint Director of Agriculture is also located at Raichur. While almost all the Divisional Offices of the Gulbarga Division are located at Gulbarga, the Divisional Office of the Agriculture Department is located at Raichur with a view to enabling the Joint Director to exercise close and effective supervision over the several agricultural development schemes undertaken in the ayacut area of the Tungabhadra Project. The jurisdiction of the Joint Director extends over all the four districts of the Gulbarga Division, *viz.*, Raichur, Gulbarga, Bidar and Bellary. In the Divisional Headquarters, he is assisted in his duties by a Headquarters Assistant, an Administrative Assistant, five Technical Assistants, two Superintendents, 28 members of clerical and ten of class IV staff.

Apart from these several agricultural institutions and establishments run by the State Agricultural Department in the district, there are two other Agricultural Research Stations run by the University of Agricultural Sciences, Hebbal, one at Raichur and the other at Gangavati. The Station at Raichur is a Regional Research Station, situated at a distance of about two miles from the Raichur Railway Station. The Chief Scientific Officer (Entomology) of the Station is its administrative head. There is also another Chief Scientific Officer (Soil Science) in the Station ; both of them are responsible to the Director of Research, University of Agricultural Sciences, Bangalore. The other technical staff attached to the Station are a Plant Scientist (Oilseeds), two Assistant Plant Scientists, one for cotton and another for millets, an Assistant Pomologist, an Assistant Animal Scientist, a Farm Superintendent, 16 Research Assistants and 18 Field/Laboratory Assistants. On the administrative side, there are 26 members of the staff including class IV officials. The Gangavati Station, which is a Medium Research Station, is headed by a Farm Superintendent, who is responsible to the Chief Scientific Officer (Entomology) of the Regional Research Station, Raichur. He is assisted in his duties by a staff consisting of 14 members, including two Research Assistants and two Field Assistants. Another Research Assistant, assisted by two Field Assistants and a Typist-Clerk, is also working at the Station under a scheme for crop-logging studies on sugarcane. These officials are under the administrative and technical control of the Professor of Chemistry and Soils of the Agriculture College at Hebbal, Bangalore.

In addition, a Central State Farm has been started recently near Jawalgera village in Sindhanur taluk, about 54 miles from Raichur, by the State Farms Corporation of India Ltd., a Government of India Undertaking, with the main object of producing and multiplying seeds of high-yielding varieties of crops. The Farm is headed by a General Manager (Director) who is assisted by a Mechanical Engineer, an Irrigation Engineer, a Deputy Director and an Administrative Officer. These are, in turn, assisted by some technical officers and also by necessary ministerial and class IV staff.

The main functions of the Agricultural Department in the district are to provide technical advice and guidance to the cultivators in order to step up agricultural production, to improve the quality of the various crops and to carry on propaganda among the agriculturists about scientific methods of agriculture by conducting demonstrations, organising crop competitions, etc. The Department also arranges for the supply of improved seeds, modern implements, chemicals and fertilisers and the like. The services of tractors and bulldozers are also made available by the Department to interested cultivators. Under the Intensive Agricultural Area and Disrtict Programmes, loans and subsidies and assistance of other kinds are also given to the cultivators.

Animal Husbandry Department

The District Officer, Animal Husbandry and Veterinary Services, is the head of the Department of Animal Husbandry in the district. He is directly responsible to the Director of Animal Husbandry and Veterinary Services, Bangalore. He supervises the working of the various veterinary institutions in the district under his control and guides the veterinarians in charge of these institutions in the discharge of their functions. He is assisted in his administrative duties in the district headquarters by four ministerial and two class IV officials. Under him, there are two Veterinary Assistant Surgeons in the district headquarters and one each in the taluk headquarters in charge of the veterinary hospitals. Besides, there are also three Veterinary Assistant Surgeons (Extension Officers) in charge of the Applied Nutrition Programme blocks at Gangavati and Kushtagi. The Veterinary Assistant Surgeons are assisted in their duties by three Veterinary and Livestock Inspectors each.

Apart from the veterinary hospitals at the district and taluk headquarters, there are 18 rural veterinay dispensaries in the district manned by Veterinary and Livestock Inspectors, who work under the control and supervision of the Veterinary Assistant Surgeons of the respective taluks. There is a Regional Poultry Farm at Gangavati under the charge of a Manager and a Poultry Extension Centre at Raichur under the charge of a Poultry Assistant. While the Manager of the Regional Poultry

Farm has, under him, a Poultry Assistant, a Collection Supervisor, a Junior Co-operative Inspector, a Poultry Supervisor and three ministerial and six class IV officials, the Poultry Assistant of the Poultry Extension Centre is assisted by a Poultry Attendant.

There are two Sheep and Wool Extension Centres in the district, one at Ginigera and the other at Koppal, under the charge of Veterinary and Livestock Inspectors. They work under the control of the Superintendent of Sheep and Wool Development Scheme, Hospet (in Bellary district). There is also a Cattle-*cum*-Sheep Breeding Farm and a Centralised Semen Collection Centre at Munirabad under the charge of a Superintendent and an Officer-in-charge, respectively. Both these officers are directly responsible to the Director of Animal Husbandry and Veterinary Services, Bangalore. While the Superintendent of the Cattle-*cum*-Sheep Breeding Farm has, under him, an Assistant Superintendent, a Dairy Supervisor and about a dozen other class III and 33 class IV officials, the Officer-in-charge of the Centralised Semen Collection Centre is assisted by two Veterinary Assistant Surgeons and a few other class III and class IV officials.

The main functions of the Department in the district are to take care of the general health of livestock, treatment against various livestock diseases, prevention of contagious diseases and breeding of improved stocks of animals and birds. The Department has also to arrange for the castration of scrub bulls and upgrading of the local non-descript cattle through natural or artificial insemination methods.

Commercial Taxes Department

For the administration of commercial taxes, there are two Commercial Tax Officers and three Assistant Commercial Tax Officers in the district. While the headquarters of the Commercial Tax Officers are located at Raichur and Gangavati, those of the Assistant Commercial Tax Officers are located at Raichur, Gangavati and Koppal. While the jurisdiction of the Commercial Tax Officer, Raichur, extends over Raichur, Manvi and Deodurg taluks, the remaining taluks of Gangavati, Koppal, Sindhanur, Lingsugur, Yelburga and Kushtagi come under the jurisdiction of the Commercial Tax Officer, Gangavati. Similarly, the jurisdiction of the Assistant Commercial Tax Officer, Raichur, extends over Raichur, Manvi and Deodurg taluks, while that of the Assistant Commercial Tax Officer, Gangavati, covers Gangavati, Sindhanur and Lingsugur taluks. The Assistant Commerical Tax Officer, Koppal, has jurisdiction over the remaining taluks of Koppal, Yelburga and Kushtagi.

Both the Commercial Tax Officers and the Assistant Commercial Tax Officers are directly responsible to the Deputy Commissioner of Commercial Taxes, Gulbarga Division, who has his

headquarters at Bellary. The Commercial Tax Officers and the Assistant Commercial Tax Officers are independent registering and assessing authorities in their respective jurisdictions. The difference in authority between the two lies in their pecuniary jurisdictions. While the Commercial Tax Officers are empowered to assess cases of dealers whose business turnover is Rs. 40,000 and above, the Assistant Commercial Tax Officers assess cases of dealers whose turnover is above Rs. 10,000 and below Rs. 40,000. Dealers, whose annual turnover is less than Rs. 10,000, are not assessed for commercial tax. Each of the officers is assisted in his duties by one or two Commercial Tax Inspectors and five to seven ministerial and three class IV officials, besides a Bill Collector.

The Acts and rules administered by the Commercial Taxes Department in the district are the Mysore Sales Tax Act, 1957, the Mysore Sales of Motor Spirit Taxation Act, 1957, the Mysore Entertainments Tax Act, 1958, and the Central Sales Tax Act, 1956, and the rules made under the respective Acts. The Commercial Tax Officers are the appellate authorities under the Mysore Entertainments Tax Act, while the Assistant Commercial Tax Officers are also the Entertainment Tax Officers under the Act.

Community Development Organisation

The Deputy Commissioner is the head of the Community Development Organisation in the district and he has been designated as the Deputy Development Commissioner for the effective implementation of the programme in the district. Insofar as this aspect of the work is concerned, he is responsible to the Development Commissioner at the State-level and also to the Divisional Commissioner, Gulbarga, at the divisional level. With the constitution of the District Development Council in November 1959 and the enactment of the Mysore Village Panchayats and Local Boards Act, 1959, the Deputy Commissioner, in addition to implementing the community development programme in the district, is also required to look after the implementation of several other programmes under the said Act.

The Deputy Commissioner reviews the progress reports of all the development blocks in the district every month and sends them to the Development Commissioner and Divisional Commissioner with his comments. The heads of the various development departments are responsible for the proper execution of the several programmes in the development blocks. They formulate and implement block-level programmes through their respective district officers in the district.

The Deputy Commissioner is assisted in this work in the district headquarters by a District Development Assistant of the

rank of Assistant Commissioner with necessary ministerial and class IV staff, and in the blocks by Block Development Officers or Deputy Block Development Officers. There are nine full blocks and five sub-unit blocks in the district under the charge of Block Development Officers and Deputy Block Development Officers, respectively. Besides, there are an Extension Officer for agriculture, an Extension Officer for co-operation and one or two Supervisors in each block, a Panchayat Extension Officer, a Social Education Organiser and a Progress Assistant in each full block and an Extension Officer for industries, an Extension Officer for animal husbandry and a Lady Social Education Organiser in three or four of the blocks. In addition, each block has about ten Village-Level Workers (Gramasevaks) and three of the blocks two to five Gramasevikas. Though these extension staff belong to different departments, they work as a team in the blocks under the general supervision and guidance of the respective Block Development Officers or Deputy Block Development Officers. Necessary ministerial staff is also attached to each of the blocks.

The Block Development Officers are also *ex-officio* Chief Executive Officers of their respective Taluk Development Boards and, in that capacity, are also required to carry out the plans and programmes of the respective Taluk Development Boards in addition to the community development programme of their blocks.

Co-operative Department

Until 1966, the administration of the Co-operative Department in the district was under the charge of an Assistant Registrar of Co-operative Societies. With the re-organisation of the Department in that year, a Deputy Registrar of Co-operative Societies was appointed as the head of the Department in the district, with three Assistant Registrars under him at the sub-divisional level. The Deputy Registrar, Raichur, is directly responsible to the Joint Registrar of Co-operative Societies, Gulbarga Division, whose headquarters is also located at Raichur. The sub-divisional offices of the Assistant Registrars are located at Raichur, Sindhanur and Koppal. While the Assistant Registrar of the Raichur Sub-Division has jurisdiction over the three taluks of Raichur, Manvi and Deodurg, that of the Sindhanur Sub-Division exercises jurisdiction over Sindhanur, Lingsugur and Kushtagi taluks. Similarly, the Assistant Registrar of the Koppal Sub-Division has jurisdiction over the remaining three taluks of Koppal, Gangavati and Yelburga.

The Deputy Registrar is responsible for the proper functioning and over-all development of the co-operative movement in the district as a whole, while the Assistant Registrars are responsible for the promotion of the movement in their respective

sub-divisions. The Deputy Registrar exercises supervision over all the co-operative institutions in the district. Insofar as the administration of co-operative law is concerned, powers have been delegated to the Assistant Registrars in respect of co-operative societies whose jurisdiction does not extend beyond a taluk, while in respect of the societies above the taluk level, the Deputy Registrar himself exercises these powers. The Deputy Registrar is also the *ex-officio* Registrar of Money-Lending and, in that capacity, he is empowered to issue licences to money-lenders and pawn-brokers and to regulate the money-lending transactions in the district.

The Assistant Registrars inspect the co-operative societies in their sub-divisions and supervise their working. They have also powers to register the societies (except special types of societies), to amalgamate them wherever necessary, to hear and dispose of disputes arising from the societies, to conduct enquiries and execute decrees.

The Deputy Registrar is assisted in his duties at the headquarters by 14 members of supervisory staff like Inspectors of Co-operative Societies and Auditors, besides eight ministerial and four class IV officials. In addition, there is a separate audit staff in the district under the control of the Deputy Registrar, consisting of five Gazetted Audit Officers, six Senior Grade Auditors, 15 Senior and six Junior Auditors and five ministerial and 20 class IV staff. The Assistant Registrars of sub-divisions together had, under them, 15 Co-operative Inspectors, 25 Supervisors and about 30 members of ministerial staff. At the block-level, they were assisted by 15 Co-operative Extension Officers, at the rate of one in each block. Though the Co-operative Extension Officers work under the administrative control of the respective Block Development Officers, the Assistant Registrars exercise technical control over their work.

In view of the important role that the co-operatives have to play in the Raichur district, which embraces a large percentage of the ayacut area under the Tungabhadra Project, the headquarters of the Joint Registrar of Co-operative Societies of the Division is also located at Raichur. The Joint Registrar exercises general supervision over the working of the Deputy Registrars of the four districts coming under his jurisdiction. He is assisted in his duties in the Divisional Office by two Assistant Registrars, one of whom functions as his Headquarters Assistant, two Senior Grade Co-operative Inspectors, one Senior Grade Auditor, half-a-dozen ministerial and three class IV officials. The Joint Registrar is closely associated with the developments under the Tungabhadra ayacut area insofar as the co-operative movement is concerned.

Employment and Training Department

The Department of Employment and Training was created, at the State-level, in the year 1964. Till then, the functions of this department were being attended to by the Department of Labour. After the bifurcation of this department in 1964, a separate Directorate was created with a Director of Employment and Training as its head. The Department maintains an Employment Exchange at Raichur. The Exchange, which was established in May 1960, is headed by a District Employment Officer, who is directly responsible to the Director of Employment and Training, Bangalore. The District Employment Officer is assisted in his duties by a Junior Statistical Officer and a few ministerial officials. Besides, there is an Employment Information Assistant at Deodurg, who also assists the District Employment Officer in studying the employment market in the area and supplies information to employment-seekers about the facilities offered by the Employment Exchange in securing them suitable employment.

The main functions of the Employment Exchange are to bring together employers in need of workers and workers in need of employment, so that the employers could find suitable workers and the workers suitable jobs. This is a free service rendered by the Exchange and neither the employers nor the employment-seekers need spend anything for availing of its services.

On the training side, the Department is running an Industrial Training Institute at Raichur, headed by a Principal, who is also directly responsible to the Director of Employment and Training, Bangalore. He has, under him, five Supervisors, 29 Instructors and nine members of ministerial and 17 of class IV staff to assist him in his duties.

Excise Department

The administration of the Excise Department in the district is under the charge of a District Excise Officer, who works under the control and guidance of the Deputy Commissioner of the district. He is assisted in his duties by an Assistant District Excise Officer, six Excise Inspectors and 21 Excise Assistant Inspectors. These executive officers are, in turn, assisted by a ministerial staff of about 30 members and a class IV staff of about 120, including 29 tree-markers and 67 excise guards.

For administrative convenience, the district has been divided into four Excise Ranges, with headquarters at Raichur, Manvi, Lingsugur and Koppal. While the Raichur Range has jurisdiction over Raichur and Deodurg taluks, the Manvi Range covers Manvi and Sindhanur taluks. Similarly, the Lingsugur Range has, under it, Lingsugur and Kushtagi taluks, while the Koppal Range consists of the Koppal, Gangavati and Yelburga taluks. Each of these ranges is under the charge of an Excise Inspector,

who is, in turn, assisted by four to five Assistant Inspectors in charge of sub-ranges. There is also a Flying Squad, under the charge of another Excise Inspector, for the detection of excise offences. There is also a Bonded Warehouse at Raichur under the charge of yet another Excise Inspector. One of the Excise Assistant Inspectors exclusively attends to court work.

The District Excise Officer exercises certain independent powers under the excise laws. He also exercises control and supervision over all the excise staff in the district. The Excise Inspectors are empowered to issue tree-tapping licences and also transport permits, to inspect liquor shops, date groves and licensed liquor manufacturing units and also to book cases in respect of contravention of excise laws. They are required to ensure proper assessment and collection of excise duties and also detection and prevention of malpractices. The duties of the Excise Assistant Inspectors include inspection of the arrack depots and shops, marking of date trees and detection of excise offences in their respective jurisdictions.

Fisheries Department

Until 1960, there was only a Pisciculturist at Munirabad to look after the fisheries development work in the Tungabhadra Project area. In 1960, however, a full-fledged office, under the charge of an Assistant Superintendent of Fisheries, was started at Raichur and was placed under the administrative control of the Superintendent of Fisheries, Dharwar. But in 1967, a new development division, comprising Raichur, Gulbarga and Bidar districts, under the charge of an Assistant Director of Fisheries, was opened and the administrative control over the Assistant Superintendent of Fisheries, Raichur, was transferred to the Assistant Director who has his headquarters at Gulbarga. The Assistant Superintendent of Fisheries has, under him, two Assistant Inspectors of Fisheries, one at Raichur and the other at Munirabad. About a dozen Fishermen and Fishery Watchers assist these officials in their duties. There is a Fish Farm at Munirabad, which is also being looked after by the Assistant Inspector of Fisheries stationed at the place. Besides, three Fisheries Extension Officers are attached to three of the community development blocks at Lingsugur, Gangavati and Kushtagi and they work under the control of the respective Block Development Officers.

The main functions of the Fisheries Department in the district include survey of cultivable waters, fish-seed collection, rearing and stocking of fish, management of fish farms, conservation and exploitation of fishery resources, fishery extension work, demonstration of fishing in deep tanks and reservoirs, organising fishermen's co-operatives and fish marketing.

Food and Civil Supplies Department

The Deputy Commissioner of Raichur is in charge of the work relating to procurement, storage, movement and distribution of foodgrains in the district. He is the licensing authority in respect of the statutory orders relating to food supplies, which are in force in the district. His functions in this connection comprise, among other things, keeping in touch with the supply position and price-trends of foodgrains in the district, authorising the opening of fair price depots wherever necessary, equitable allocation of foodgrains allotted to the district, procurement of foodgrains and regulation of their supplies.

The Deputy Commissioner is also in overall charge of the work relating to civil supplies in the district. He has to attend to all items of work relating to the control and distribution of several essential commodities like kerosene oil, diesel oil, vegetable oils, textiles, baby foods, soaps, matches, paper and stationery, cycle tyres and tubes and torch cells, under the Essential Commodities Act, 1955. Insofar as these two aspects of the work are concerned, the Deputy Commissioner is responsible to the Director of Food and Civil Supplies in Mysore, Bangalore.

The Deputy Commissioner is assisted in his work relating to food and civil supplies by a whole-time Food Assistant with necessary executive, ministerial and class IV staff. In the taluks, the Tahsildars also attend to the work of food supplies as may be entrusted to them by the Deputy Commissioner from time to time. There is also an Inspector of Food and Civil Supplies at Raichur to assist the Deputy Commissioner in respect of civil supplies work. Under the authority of the Deputy Commissioner, he enforces the several civil supplies control orders issued by the State and Central Governments from time to time and checks the accounts maintained by the licensed dealers of essential articles in order to detect malpractices, if any.

Forest Department

The administration of the Forest Department in the district is under the charge of a Divisional Forest Officer, who has his headquarters at Raichur. He is directly responsible to the Conservator of Forests, Bellary Circle, Bellary. The Divisional Forest Officer is responsible for the management, administration and execution of all forest works under his charge. He is empowered to enter into contracts on behalf of the State Government in the disposal of forest produce which is auctioned annually. Detection and prevention of forest offences, periodical inspection of State forests and implementation of the various forest development schemes are amongst his duties.

The forests of the district are divided into five ranges, each of which is under the charge of a Range Forest Officer, who has to execute all orders of the Divisional Forest Officer in the

management, supervision and administration of the range. The headquarters of the Range Forest Officers are located at Raichur, Lingsugur, Gangavati, Kushtagi and Munirabad. Survey, demarcation and disposal of *laoni* cases as also the realisation of forest revenue within his jurisdiction are among the duties and functions of the Range Forest Officer. There are, in all, thirteen Foresters in the district, at the rate of two to three in each range, and they work directly under the control of the respective Range Forest Officers. These five ranges have been further divided into 41 beats and each beat is under a Forest Guard, who is responsible for the protection of the State forests, detection of offences, etc., within his beat. The Forest Guards work under the supervision and control of the Foresters.

The main functions of the Forest Division in the district include afforestation of the depleted State forests, conservation and maintenance of plantations and village forests with a view to providing timber, firewood and minor forest produce to the people and protection of whatever natural vegetation that exists in the district.

Horticultural Department

Until 1959, the parks and gardens in Raichur district were being looked after by the Public Works Department. With the gradual expansion of the State Horticultural Department, all the horticultural activities in the district were transferred to the Horticultural Department during 1959-60. An Assistant Fruit Development Officer was stationed at Raichur with jurisdiction over six of the taluks, *viz.*, Raichur, Manvi, Deodurg, Lingsugur, Kushtagi and Yelburga. The remaining three taluks lying within the Tungabhadra ayacut area, *viz.*, Koppal, Gangavati and Sindhanur, were placed under the charge of another officer designated as Assistant Director of Horticulture, Tungabhadra Project Area, with his headquarters at Munirabad. In 1964, his headquarters was shifted to Sindhanur, in view of its central position in the ayacut area. Both these officers were made directly responsible to the Director of Horticulture in Mysore, Bangalore.

With the increase in the tempo of horticultural development activities in the Tungabhadra Project ayacut area, a Coconut Development Officer (of Class I status) was posted to Sindhanur in 1968 and was made responsibe for the implementation of all the horticultural development programmes in the ayacut area, including Manvi taluk (which was formerly under the jurisdiction of the Assistant Fruit Development Officer), and the Assistant Director of Horticulture was placed in charge of all the horticultural orchards in the area.

While the Assistant Fruit Development Officer, Raichur, is assisted in his duties by a District Horticultural Inspector at Raichur, a Horticultural Assistant at Kushtagi, an Agricultural Demonstrator at Lingsugur, a Plant Propagator, 13 Fieldmen and Field Asistants, seven Spraying Attenders and Malis, the Coconut Development Officer has, under him, a Horticultural Assistant in each of the four taluks, an Assistant Horticultural Instructor in charge of the Horticultural Training School at Munirabad, besides five to ten Fieldmen and three to four Spraying Attenders in each taluk. The Assistant Director of Horticulture is assisted in his duties by a Farm Manager in charge of the Government Orchard at Odderhatti, one to two Plant Propagators each in charge of the Orchard-*cum*-Nursery at Munirabad and the Horticultural Farm at Sindhanur, besides one to two Fieldmen and Spraying Attenders in each of these Orchards and/or Farms. In addition, these officers are also assisted by some members of ministerial and class IV staff on the administrative side.

The main functions of the Horticultural Department in the district include rendering of technical assistance in the laying out and cultivation of fruit, vegetable and flower gardens, supply of seeds, seedlings and other planting materials, protection of horticultural plants from pests and diseases, establishing of demonstration and model horticultural farms and orchards, training of personnel in horticulture, organising of competitions, exhibitions and other propaganda work, introduction and propagation of new varieties of fruits, flowers and vegetables suited to the local conditions and such other functions relating to development of horticulture in all its aspects.

Industries and Commerce Department

The Industries and Commerce Department in the district is under the charge of an Assistant Director of Industries and Commerce, who is responsible to the Director of Industries and Commerce, Bangalore. The Assistant Director is assisted in his duties by a Senior Industrial Supervisor, a Junior Industrial Supervisor, a District Weaving Supervisor for handlooms and two Weaving Demonstrators, besides necessary ministerial and class IV staff. In addition, in the development blocks at Raichur, Lingsugur, Koppal and Kushtagi. there are four Industrial Extension Officers to look after the arts, crafts and other industrial programmes. Although they work under the supervision of the respective Block Development Officers, they are under the technical control of the Assistant Director.

The Assistant Director of Industries and Commerce is responsible for the development of industries in the district in general. His main functions include undertaking of industrial

surveys, collection of statistical information on industries, drawing up of plans and schemes for the development of industries and supervision over the activities of artisan training institutions, industrial production centres and sales emporia of the Department. He also exercises supervision over the activities of the industrial co-operative societies and *mahila mandals* receiving assistance from the Department. He has also to implement the plan schemes pertaining to handlooms, handicrafts, coir and other small-scale industries including village and cottage industries, recommend deserving cases for financial assistance under the State Aid to Industries Act and for supply of machinery under the hire purchase scheme, guide the small-scale industrialists in the matter of location of industrial units and procurement of raw materials and give technical guidance generally to the industrialists.

The Industrial Supervisors and the Extension Officers are required to supervise and inspect, as and when necessary, all the industrial co-operative societies and also other institutions like handloom emporia, *mahila mandals* and craft societies and prepare statistical data relating to industrial units in their respective jurisdictions. The District Weaving Supervisor looks after the work relating to the textile branch with the help of Weaving Demonstrators.

Information and Tourism Department

The officer representing the Department of Information and Tourism in the district is the District Publicity Officer. He is directly responsible to the Assistant Director of Information and Tourism, Gulbarga Division, Gulbarga. The District Publicity Office, which was established for the first time in February 1966 at Raichur, has an Information Centre attached to it. A Receptionist, two or three members of ministerial staff, a Cinema Operator and three class IV officials assist the District Publicity Officer in his duties.

The main functions of the Department in the district are to publicise the various developmental activities and also welfare measures of the Governmnet among the people with a view to enlisting their co-opration and participation in the task of all-round development of the district. For this purpose, various media of publicity and propaganda, such as film shows, exhibitions, press releases, etc., are made use of.

There are also two Radio Supervisors of the Department in the district, one at Raichur and the other at Koppal, to look after the installation, repairs and maintenance of community radio sets in the rural areas of the district. As at the end of March 1969, there were 223 community radio sets and eleven Radio Rural Forums in the district. Both the Radio Supervisors work

under the general control and supervision of the Assistant Radio Engineer, Bijapur Division, Bijapur.

Labour Department

It was in 1947 that a labour office, to look after the welfare of industrial labour, was first set up in Raichur district. The administration of this department in the district is now being looked after by a Labour Officer, who has his headquarters at Raichur. He works under the control and supervision of the Assistant Commissioner of Labour, Bellary. In addition to Raichur district, the Labour Officer has jurisdiction over Bellary district also. He is assisted in his duties in Raichur district by four Labour Inspectors, two of whom are stationed at Raichur. While one of them has jurisdiction over Raichur proper (town) and Deodurg taluk, the other has jurisdiction over Raichur taluk (excluding Raichur town) and also the taluks of Lingsugur and Manvi. The headquarters of the other two Labour Inspectors are located at Gangavati and Hospet. While the taluks of Gangavati, Sindhanur, Kushtagi and Yelburga come under the jurisdiction of the Labour Inspector, Gangavati, the Labour Inspector, Hospet, has jurisdiction over Koppal taluk.

The Labour Officer has to enforce the various labour laws in the districts coming under his jurisdiction. He has to safeguard the rights and privileges of the employees in the various industrial establishments located in his jurisdiction. Whenever industrial disputes occur, by virtue of the conciliation powers vested in him under the Industrial Disputes Act, 1947, he has to mediate and strive to bring about an amicable settlement between the employers and the employees. He has also to supervise and guide the work of the Labour Inspectors functioning under him. Besides, as an Additional Inspector under the Factories Act, 1948, Payment of Bonus Act and the Mysore Industrial Establishments (National and Festival Holidays) Act, 1963, he has to inspect the various factories and establishments so as to ensure that the provisions of these Acts are implemented by the employers. He has also to attend to the work relating to the administration of the Workmen's Compensation Act, 1923, the Indian Trade Unions Act, 1926, the Industrial Employments (Standing Orders) Act, 1946, and various other Acts in force in the district. He is also a Conciliation Officer under the Industrial Disputes Act.

The Labour Inspectors have been notified as Inspectors under the Mysore Shops and Commercial Establishments Act, 1961, Payment of Wages Act, 1936, Minimum Wages Act, 1948, Weekly Holidays Act, 1942, Motor Transport Workers Act, 1961, Trade Unions Act, Maternity Benefits Act and the Mysore Beedi Industrial Premises (Regulation of Conditions of Work) Act, 1964, and, as such, they are required to implement the

provisions of these Acts and rules in the shops, commercial and industrial establishments in their respective jurisdictions.

While the Labour Officer is assisted in his duties in the headquarters by a few ministerial and class IV officials, each of the Labour Inspectors is assisted by an Attender and a Peon. There is also a Labour Welfare Centre at Raichur, run by the Department. It is under the charge of a Supervisor and a Tailoring Instructress, both of whom are responsible to the Labour Officer.

Marketing Department

Prior to 1st February 1967, the work relating to the Marketing Department in the district was being looked after by the Senior Marketing Officer, Gulbarga Division, Gulbarga, with the assistance of a District Marketing Inspector stationed at Raichur. However, with the re-organisation of the Marketing Department in the State in February 1967, a District Marketing Officer was posted to Raichur, with necessary staff, to attend to this aspect of the work in the district. He is directly responsible to the Deputy Chief Marketing Officer, Gulbarga Division, Gulbarga. He is assisted in his various duties in the district headquarters by a Marketing Inspector, three ministerial and two class IV officials. The Government have recently sanctioned the establishment of an Oil Grading Laboratory at Raichur, and the staff attached to this Laboratory, *viz.*, a Chemist, three Laboratory Assistants and three class IV officials, are also under the control of the District Marketing Officer. There is also a Price Reporting Agent at Sindhanur for collection of market statistics in the area.

The main functions of the District Marketing Officer include the organisation, development and administration of regulated markets in the district for agricultural commodities and livestock, conducting of market surveys of agricultural commodities, compilation of market rates of regulated and other important commodities and supervision of grading, under 'Agmark', of commodities like eggs, etc.

There are four regulated markets in the district, one each at Raichur, Gangavati, Koppal and Kushtagi. Of these, the Raichur Regulated Market is the biggest and, as such, a Key Market Superintendent (a Senior Class I Officer) has been posted to function as the Secretary of this Market Committee. He is directly responsible to the Chief Marketing Officer in Mysore, Bangalore. Similarly, the Market Committees of Gangavati and Koppal are looked after by a Senior Market Superintendent each, while that of Kushtagi is under the charge of an Assistant Market Superintendent. These Market Superintendents are the chief executive officers of the respective

regulated market committees. They have to carry out the resolutions passed and directions issued by the committees from time to time in accordance with the provisions of the relevant Act and rules.

Public Works Department

Consequent on the implementation of a number of development schemes in the ayacut area of the Tungabhadra Project, the Public Works Department in the district has a considerable number of officers and officials working in it as compared to many of the other districts in the State. Till 1962, the road communications, buildings and minor irrigation works in the district were being looked after by a lone Executive Engineer stationed at Raichur. In 1962, another Public Works Division was created with headquarters at Koppal and was placed under another Executive Engineer. While the Raichur Division consists of the Raichur, Manvi, Lingsugur and Deodurg taluks, the Koppal Division consists of the Koppal, Gangavati, Sindhanur, Kushtagi and Yelburga taluks. Both these Executive Engineers are directly responsible to the Superintending Engineer, Gulbarga Circle, Gulbarga.

The Executive Engineers are assisted in their duties by Assistant Engineers, Supervisors and necessary ministerial and class IV staff. There is an Assistant Engineer in each taluk headquarters in charge of a sub-division (each taluk is a sub-division). The Raichur Division has a special sub-division at Raichur for bridge construction work. Thus, including this sub-division, there are, in all, ten public works sub-divisions in the district under the two Divisions to look after the communications, buildings and minor irrigation works in general. Each of these Divisional Executive Engineers is assisted, in the Divisional Office, by a staff, both technical and ministerial, consisting of about 30 to 35 members, including a Personal Assistant (Technical), Junior Engineers, Supervisors, I and II Division Clerks, etc. Each of the Assistant Engineers is also likewise assisted by Junior Engineers, Supervisors, Work Inspectors and others who number, on an average, from 20 to 40 persons (including the ministerial staff and work-charged establishment), depending upon the workload of each sub-division. These figures do not include road gangs and other labourers.

Functions of Executive Engineer

The main functions of the Executive Engineer include construction and maintenance of Government buildings, roads, bridges and minor irrigation works within his jurisdiction. He has powers to entrust sanctioned works costing upto rupees one lakh, provided the excess, if any, does not exceed eight per cent over the sanctioned estimate as recast on the basis of current schedule of rates. He is also empowered to accord administrative approval and technical sanction to estimates of works costing

upto Rs. 50,000 in each case, in respect of original works which are specifically provided for in the budget and included in the plan programme. He can entrust all works costing Rs. 10,000 or more to contractors after calling for tenders, whereas works costing less than Rs. 10,000 can be entrusted straightaway, at rates not exceeding the current schedule of rates, to local contractors who are duly registered for taking up such works. He also scrutinises the estimates of works prepared by other departments. He has been invested with a wide range of powers under the Public Works Code and the Manual of Financial Powers so as to enable him to carry out expeditiously and efficiently the various civil works entrusted to him. Being an executive officer, he has to go round the taluks under his jurisdiction for purposes of inspection of roads, buildings, bridges, irrigation works, canals and the like. He is the professional adviser to all other departments in respect of public works. He has also to perform the functions of an Irrigation Officer under the Mysore Irrigation Act, 1965.

The Assistant Engineers are empowered to execute all the above mentioned public works in their respective jurisdictions under the guidance of the Executive Engineers concerned. They have to supervise the work of the Junior Engineers, Supervisors, etc., working under them and check-measure all the works and are responsible for the satisfactory execution of the works in their jurisdictions. They are also members of the Block Development Advisory Committees in their respective taluks.

There is another Public Works Division in the district called the Minor Irrigation Investigation Division, with headquarters at Raichur, under the charge of another Executive Engineer. This Division, which was started in 1959, has jurisdiction over all the four districts of the Gulbarga Division. As the nomenclature of the Division indicates, it is required to investigate about possible minor irrigation works costing upto rupees fifteen lakhs in these four districts. The Executive Engineer of this Division also is responsible to the Superintending Engineer, Gulbarga Circle, Gulbarga.

There are four sub-divisions under this Division, one in each of the four districts, each under the charge of an Assistant Engineer. Apart from these Assistant Engineers of the sub-divisions, the Executive Engineer of this Division is assisted in his duties in the Divisional Office by three Junior Engineers, three Draughtsmen and about ten members of ministerial staff.

Tungabhadra Project Circle

A Circle Office of the Public Works Department, called the Tungabhadra Project Circle, was established at Munirabad in Koppal taluk in the year 1949. This Circle, which is headed by

a Superintending Engineer, is responsible for the maintenance of the Tungabhadra dam as also the canals under it upto a certain length in addition to other works. There are four Divisions under this Circle, with headquarters of one at Munirabad and the rest in Bellary district. Of these, the Munirabad Division, called No. 1, Tungabhadra Reservoir Division, the headquarters of which falls within Raichur district, has, under it, four sub-divisions, three at Munirabad and one at Egalkera. While this Division is headed by an Executive Engineer, the sub-divisions are under the charge of an Assistant Engineer each. These sub-divisions look after the maintenance of the Tungabhadra Dam and the Left Bank Canal upto 18 miles, together with its distributaries and sub-distributaries within Raichur district, as also the old Vijayanagara channels.

While the Superintending Engineer is assisted in his duties in the Circle Office by a Personal Assistant of the rank of Assistant Engineer, a Registrar, six Junior Engineers, six Draughtsmen, three Tracers, two Managers, 17 clerical and 11 class IV officials, the Executive Engineer, No. 1, Tungabhadra Reservoir Division, is assisted in the Divisional Office, by five Junior Engineers, a Draughtsman, two Tracers, a Manager, an Accounts Superintendent and about 30 other members of ministerial and class IV staff. Similarly, the Assistant Engineers are assisted by three to four Junior Engineers, four to five Supervisors, one or two Draughtsmen and about ten ministerial and class IV officials.

Tungabhadra Canal Circle

There is also another Circle of the Public Works Department in the district at Yermaras near Raichur. This Circle, known as the Tungabhadra Canal Construction Circle, was established in December 1965. This Circle is in charge of the construction and maintenance of the Tungabhadra Left Bank Canal from miles 19 to 141, together with its distributaries and sub-distributaries, Rajolibanda Anicut and the canal under it from 0 to 27 miles, the Vijayanagara canals in Gangavati taluk, the Kanakanala Project, the Bichal channel and the construction of ayacut roads in the command area of the Tungabhadra Left Bank Canal (from 19 to 141 miles). Under this Circle, there are four Divisions with headquarters at Yermaras. Odderhatti, Sindhanur and Sirvar, under the charge of an Executive Engineer each. These four Divisions have been further sub-divided into 21 sub-divisions, each under the charge of an Assistant Engineer. While the Yermaras Division has six sub-divisions, three at Yermaras, two at Gillesugur and one at Rampur, the Odderhatti Division has also an equal number of sub-divisions, two each at Karatgi and Odderhatti and one each at Manvi and Kilarahatti. The Sindhanur Division has five sub-divisions, two each at Maski and Turvihal and one at Sindhanur, while the Sirvar Division has four sub-divisions, one each at Malat, Manvi, Hirekotankal and Sirvar.

The Superintending Engineer is assisted in his duties in the Circle Office by a Personal Assistant (Assistant Engineer), six Junior Engineers, two Draughtsmen, four Assistant Draughtsmen, three Tracers and a Blue-Printer on the technical side and a Registrar with about 20 members of ministerial and ten of class IV staff on the administration side. Each of the Executive Engineers of Divisions has, under him, three to seven Junior Engineers, two Draughtsmen, two Tracers, one to three Blue-Printers and about 20 to 25 members of ministerial and class IV staff. Similarly, the Assistant Engineers of sub-divisions are assisted in their duties by three to ten Junior Engineers, three to eight Supervisors, an Assistant Draughtsman, a Tracer and about ten ministerial and class IV officials.

The Superintending Engineer of a Circle has powers to accord administrative sanction to estimates of works costing upto rupees one lakh each in respect of plan works and upto Rs. 50,000 each in respect of non-plan works. He can also accord technical sanction in respect of original works costing upto rupees two lakhs each and in respect of other works upto rupees three lakhs each. Besides, he can also let out sanctioned works, either wholly or in parts, costing upto rupees five lakhs each, provided the excess, if any, over the corresponding amount of the sanctioned estimate is not more than 12 per cent.

Registration and Stamps Department

The administration of the Registration and Stamps Department in the district is looked after by the Special Deputy Commissioner of Raichur, who is also the *ex-officio* District Registrar and Collector of Stamps. Insofar as these aspects of the work are concerned, the Special Deputy Commissioner is responsible to the Inspector-General of Registration and Commissioner of Stamps in Mysore, Bangalore. He is assisted in this work in the district headquarters by a Headquarters Assistant and two members of ministerial staff. Besides there is a Headquarters Sub-Registrar at Raichur, a I Grade Sub-Registrar at Koppal and five II Grade Sub-Registrars, one each at Manvi, Kushtagi, Lingsugur, Sindhanur and Gangavati. In the Yelburga and Deodurg taluks, the respective Revenue Sheristedars function as *ex-officio* Sub-Registrars. All these Sub-Registrars work under the control of the District Registrar and each of them is assisted by one or two clerks and one or two class IV officials.

The District Registrar exercises general control and supervision over the work of all the Sub-Registrars in the district. He has powers to receive and register documents which might be registered by any Sub-Registrar. The deposit of wills has to be made only at the District Registrar's Office. He is also empowered to conduct enquiries and pass orders in respect of appeals preferred by the public against the orders of the Sub-Registrars. The Headquarters Assistant to the District Registrar is also the

Inspector of Registration and, in that capacity, he has powers to inspect all the Sub-Registrars' Offices in the district. The Sub-Registrars are responsible for registration of documents and are also *ex-officio* Marriage Registration Officers under the Special Marriages Act, 1954.

As Collector of Stamps, the Special Deputy Commissioner exercises such of the powers and functions as are conferred on him by the Stamps Act and the rules issued thereunder. The Headquarters Assistant to the District Registrar and his staff assist the Special Deputy Commissioner in this work as well.

Religious and Charitable Endowments Department

The administration of the Religious and Charitable Endowments Department in the district is entrusted to the Deputy Commissioner who is designated as the Director of Endowments for the purpose. In that capacity, he has control over all the endowment institutions in the district. He exercises supervision over the administration of the affairs relating to these institutions in accordance with the provisions of the Hyderabad Endowments Regulation of 1349 F. which is still in force in the district. He is assisted in this work in the district headquarters by an Endowments Assistant (of the status of a Deputy Tahsildar), three clerical and two class IV officials. At the taluk-level, however, there is no separate staff for the purpose. The revenue staff attached to the Tahsildars' offices handle the works relating to endowments. The Tahsildars also exercise the powers and perform the duties of endowment officers in their respective jurisdictions. The District Deputy Commissioner, in so far as the administration of religious and charitable endowments in the district is concerned, is responsible to the Commissioner for Religious and Charitable Endowments, Bangalore. All the religious and charitable endowments in the district, except Muslim Wakfs, have been brought under the jurisdiction of these revenue officers. They have powers to inspect all endowment institutions in their respective jurisdictions, to enquire into the claims of temple servants and to exercise disciplinary control over them.

Social Welfare Department

There is a District Social Welfare Officer at Raichur to look after the work relating to the Social Welfare Department in the district. His office, established in 1951, is attached to the office of the Deputy Commissioner, and the District Social Welfare Officer works as the former's Executive Assistant in all matters relating to social welfare. But he is under the technical control of the Director of Social Welfare in Mysore, Bangalore.

The District Social Welfare Officer is assisted in his duties at the taluk-level by Social Welfare Inspectors, one in each taluk, who work under the control of the respective Block Development Officers. At the district headquarters, he is assisted by an

Accountant and three clerks. There are several social welfare institutions in the district, such as nurseries-*cum*-women welfare centres, hostels for boys and girls, tailoring centres for women, residential schools and agricultural colonies, and the staff attached to them work under the control of the District Social Welfare Officer. The number of such staff in the district in 1969 included 16 Superintendents of hostels, 11 Teachers and 11 Organisers.

The District Social Welfare Officer is mainly responsible for the implementation of the several schemes sanctioned for the welfare of the Scheduled Castes, the Scheduled Tribes (including Denotified Tribes) and other Backward Classes in the district. All these schemes are implemented through the respective Taluk Development Boards with the help of the Social Welfare Inspectors at the taluk-level.

The Director of Social Welfare is also the *ex-officio* Chief Inspector of Certified Schools. For looking after this aspect of the work in the district, there is a Probation Officer at Raichur. He is responsible for the administration of the Probation of Offenders Act in the district. He is directly responsible to the Regional Probation Superintendent, Bangalore. Besides, for the administration of the Mysore Childern's Act, 1964, in the district, there is another Probation Officer at Raichur. He is also the Superintendent of the Remand Home established at Raichur under the Act. He is assisted in his work by a Clerk-*cum*-Typist, a Matron, three Guards and three other class IV officials. Similarly, a Reception Centre for women has also been established at Raichur under the Suppression of Immoral Traffic in Women and Girls Act. This Centre is under the charge of a Lady Superintendent. She is assisted in her work by a Matron, a Teacher (part-time), a Lady Guard and three other class IV officials. Both the Probation Officer-*cum*-Superintendent of the Remand Home and the Superintendent of the Reception Centre are responsible to the Chief Inspector of Certified Schools, Bangalore. (*See* aslo Chapter XII).

Statistics Department

Till 1959, there was no District Statistical Agency in Raichur district. The Divisional Statistician, who was stationed at Gulbarga, used to look after the statistical work in respect of this district as well. In 1959-60, a separate District Statistical Office was established at Raichur under the charge of a District Statistical Officer. The nomenclature of this Department, which was known as the Department of Statistics till recently, was changed as the "Bureau of Economics and Statistics" from March 1968, in keeping with the nature of duties and functions of the Department. The District Statistical Officer, Raichur, is directly responsible to the Director, Bureau of Economics and Statistics, Bangalore.

The main functions of the District Statistical Officer include collection of all essential statistical data about the district from various Government departments, semi-government organisations and private bodies. He has to correlate and analyse them and send them on to the head office for being processed and published. Besides compilation of general statistics, the unit has also to attend to collection of vital statistics, conducting of crop estimation surveys on principal food and non-food crops, collection of agricultural statistics, conducting of various sample surveys and such other functions as may be entrusted to it by the head office. The Unit also publishes a statistical sheet called "Raichur at a Glance" every year containing some basic statistics about the district.

The District Statistical Officer is assisted in his duties by a few Statistical Assistants, Enumerators and Computors with necessary ministerial and class IV staff. Besides, there are Progress Assistants, one in each full block, to assist the District Statistical Officer at the block-level.

Survey, Settlement and Land Records Department

The work relating to Survey, Settlement and Land Records in the district is under the charge of an Assistant Superintendent of Land Records, who is directly responsible to the Divisional Superintendent of Land Records, Gulbarga Division, Gulbarga. This office was established at Raichur in the year 1919. The Assistant Superintendent of Land Records, whose jurisdiction covers the entire district, is assisted in his duties by a Supervisor and six I Division and five II Division Surveyors on the executive side and six clerks on the ministerial side, besides 15 class IV servants, such as Dafterbunds and Peons.

The main functions of this department in the district include proper maintenance of all land records, bringing of the land and survey records up-to-date, settlement of boundaries, maintenance of boundary marks of survey numbers, conducting of sub-division survey work under the record of rights, providing of technical guidance to revenue officers and imparting of training to Revenue Inspectors as and when necessary. It also supplies village maps and certified copies and extracts of survey records to the public on payment of prescribed fees.

There is also another Assistant Superintendent of Land Records at Raichur, exclusively for *hissa* survey work in the district. He is directly responsible to the Superintendent of Land Records, Hissa Survey, Bellary. The sanctioned strength of establishment of the Assistant Superintendent consists of seven Supervisors, six I Division and 71 II Division Surveyors, three clerical and 41 class IV officials. However, since *hissa* survey work has been completed in eight out of the nine taluks of the

district, most of the posts of II Division Surveyors and class IV staff have been kept vacant for sometime past.

Transport Department

Prior to 1957, the functions relating to the Motor Vehicles Department in Raichur district were attached to the District Superintendent of Police. From April 1957, however, the Regional Transport Officer, Gulbarga, was made to exercise these functions in respect of this district also, till January 1958 when a separate office for the district was established.

There is a Regional Transport Authority at Raichur, which is a quasi-judicial body, presided over by the District Deputy Commissioner, who is its *ex-officio* Chairman. There are two other official and one non-official members on the body, the Regional Transport Officer of the district being its Secretary. He is the executive officer exercising the powers delegated to him by the Regional Transport Authority and also carrying out the various administrative functions delegated to him under the Motor Vehicles Act. The Regional Transport Officer is the registering and the licensing authority for the registration of all motor vehicles and also for the issue of tax tokens, driving licences and conductors' licences. While the Regional Transport Authority functions under the general control of the Mysore State Transport Authority, Bangalore, the Regional Transport Officer, Raichur, works under the control and guidance of the Commissioner of Transport, Bangalore. The Regional Transport Officer exercises the powers under the Motor Vehicles Act in respect of issue of permits, stage carriage timings, contract carriage permits, private carrier permits and regulation of public carriers. He is also responsible for collection of taxes under the Motor Vehicles Taxation Acts. He is required to conduct surprise checks of motor vehicles and conduct route surveys to find out the traffic potentialities of various routes. The Regional Transport Officer is assisted in his duties by five Motor Vehicles Inspectors, a dozen ministerial and about ten class IV officials.

Treasury Department

Until 1964, the Deputy Commissioner of the district was the head of the government treasuries in the district and the District Treasury Officer was working under his control and supervision. In 1964, the Treasury Department was re-organised and the Deputy Commissioner was relieved of this additional charge of treasury functions and the District Treasury Officer was given the full charge of the treasury and was made the head of the Treasury Department in the district. He is now directly responsible to the Director of Treasuries in Mysore, Bangalore.

The District Treasury Officer, Raichur, is assisted in his duties in the district treasury by an Assistant Treasury Officer, a Head Accountant, a Deputy Accountant, a Shroff, twenty-seven

ministerial and five class IV officials. There is a sub-treasury in each of the taluk headquarters, each of which is under the charge of a Sub-Treasury Officer. While the Sub-Treasury Officer, Koppal, is assisted by a Head Accountant, the other Sub-Treasury Officers are assisted by a Deputy Accountant each, besides necessary ministerial and class IV officials, numbering about four to five. All these sub-Treasury Officers are directly responsible to the District Treasury Officer.

It is the responsibility of the District Treasury Officer to see that both the district and taluk treasuries function properly. He has to conduct technical inspection of the sub-treasuries once a year and also surprise inspections twice a year. He is solely responsible for the custody of cash, government stamps, other valuables and important documents in the treasury. He has to see that all the monthly accounts and returns are submitted punctually to the Director of Treasuries as well as the Accountant-General, Bangalore. Since almost all the treasuries in the district, except that of Deodurg, are bank-treasuries, cash transactions only in respect of pensions and savings bank accounts are handled by them, while the other government cash transactions are done by the State Bank of Hyderabad, which has opened branches in all the taluk headquarters, except Deodurg.

Central Government Departments

Central Excise Department

The Central Excise administration in the Raichur district is looked after by a Circle Officer who has his headquarters at Bellary. For administrative convenience, the district has been divided into three ranges, each of which is under the charge of an Inspector. The headquarters of one range is located at Raichur and it comprises the taluks of Raichur, Manvi and Deodurg. The second range has its headquarters at Koppal and it consists of Koppal and Yelburga taluks. The third range, with headquarters at Gangavati, has jurisdiction over the taluks of Gangavati, Kushtagi, Lingsugur and Sindhanur. In addition, another Inspector, who is in charge of the Bellary Town Range, also exercises jurisdiction over Munirabad proper within the district of Raichur.

The Inspectors of these Central Excise ranges perform their functions and duties in accordance with the provisions of the Central Excise Act, 1944, and the rules issued thereunder. The commodities on which excise duty is levied in this district are sugar, sulphuric acid, pulp-board, tobacco, non-essential vegetable oils, matches and cotton fabrics made from power-looms. The gold refinery at the Hutti Gold Mines is also under the control of this Department.

Income-tax Department

For the purpose of collection of income-tax in the district under the former Hyderabad Income-Tax Act, an Income-Tax Office was established at Raichur in the year 1949. Now, for the administration of the Central Income-Tax Act, there are two Income-Tax Officers in the district, *viz.*, a First Income-Tax Officer with jurisdiction over Raichur taluk, including the Raichur city, and a Second Income-Tax Officer with jurisdiction over all the remaining taluks of the district. They are responsible to the Inspecting Assistant Commissioner of Income-Tax, Dharwar.

The Income-Tax Officers are assisted in their duties by two Income-Tax Inspectors, one exclusively for tax recovery work and the other for general duties, besides seventeen members of ministerial and class IV staff.

Posts and Telegraphs Department

The administration of the Indian Posts and Telegraphs Department in the district is under the charge of a Superintendent of Post Offices, who has his headquarters at Raichur. Till May 1968, it was under the control of the Superintendent of Post Offices, Gulbarga Division. The Superintendent of Post Offices is directly responsible to the Director of Postal Services, Bangalore, in respect of postal matters and to the Director of Telegraphs, Bangalore, in respect of telegraph matters. For purposes of postal administration, the Raichur district was constituted into a separate Division with effect from 1st May 1968 and it has three sub-divisions under it with their headquarters at Raichur, Sindhanur and Koppal. While the Superintendent of Post Offices, Raichur, is the head of the Division, an Inspector of Post Offices is in charge of each of the sub-divisions. There are also ten Mail Overseers, three in Raichur Sub-Division, three in Sindhanur Sub-Division and four in Koppal Sub-Division, to assist the Sub-Divisional Inspectors in their administrative work, mostly in the arrangement of mails.

There is a head post office at Raichur under the charge of a Head Postmaster, four lower selection grade post offices headed by a Lower Selection Grade Sub-Postmaster each, 40 sub-post offices under the charge of a Sub-Postmaster each and 356 branch post offices under the charge of a Branch Postmaster each. All these postmasters work under the administrative control of the Superintendent of Post Offices. The latter is also an Inspecting Officer and, as such, he inspects the post offices as also the offices of the Sub-Divisional Inspectors, periodically. He is the appointing and disciplinary authority in respect of postal clerks attached to post offices and also branch postmasters. The Sub-Divisional Inspectors are also inspecting officers and appointing authorities in respect of Agents of extra-departmental post offices.

Provident Fund Inspectorate

For the administration of the Provident Funds Act, 1952, and the scheme framed thereunder, there is a Provident Fund Inspector at Raichur. This office, which was established in February 1959, is the headquarters of the Raichur Division, which comprises also the districts of Gulbarga, Bidar and Bellary. Upto June 1964, the districts of Belgaum, Bijapur, Dharwar and North Kanara were also included in this Division and they were separated from it in that year. The Provident Fund Inspector, who is the head of the Division, is directly responsible to the Regional Provident Fund Commissioner, Bangalore. He is assisted in his duties in the office by a clerk and a class IV official.

The main functions of the Provident Fund Inspector are to visit all scheduled industries, as notified by the Government of India, employing 20 or more persons, in his jurisdiction and to see whether the provisions of the Provident Funds Act are complied with by the respective managements. In case of default, he has powers to file complaints and institute recovery proceedings against such managements.

Telephone Department

The telephone systems in Raichur district are under the charge of two Engineering Supervisors, both of whom work under the control of the Sub-Divisional Officer, Telegraphs, Gulbarga. Though the headquarters of both the Engineering Supervisors is at Raichur, one of them looks after the provision and maintenance of telephone facilities in Raichur city and the other outside the city, *i.e.*, in other places in the district. They are assisted in their duties by a technical staff consisting of three Telephone Inspectors, a Repeator Station Assistant, ten Mechanics, four Wiremen and 24 Linemen. Besides, there are also 33 ministerial operatives, 32 Telephone Operators and one Monitor (Telephones) assisting the Engineering Supervisors in the non-technical aspect of their functions.

CHAPTER XIV

LOCAL SELF-GOVERNMENT

Beginnings of local bodies

MUNICIPAL administration was first introduced in the former Hyderabad State by Sir Salar Jung in 1869 A.D. when he was the Prime Minister of that State. A special committee consisting of six members, including four from *paighas* and other estates, was appointed to supervise the working of the local self-governing bodies. The executive head of each municipality was styled as Superintendent of Roads and he was also the president of the municipal committee. Disputes between a municipality and the public of the place were settled by a few respectable persons appointed for the purpose and who were invested with the powers of a small causes court to dispose of money suits upto the value of Rs. 20.

During 1877, a Local Boards Regulation was promulgated authorising the levy of a local cess of one anna in the rupee of land revenue in all settled tracts. This regulation established local boards in the districts of the State with certain defined powers to administer the funds. In 1894, the municipal committees in various places consisted of nine officials, five non-officials and five ex-officials, all nominated by Government. The powers of Local Boards were described in the Regulation of 1899 (a later amended Act) and the Local Boards were permitted to prepare annual budgets, spend substantial sums from the previous year's balance and to supervise works through technical agencies. A Central Board was also set up to control and supervise the Local Boards. Some years later, this Central Board was abolished and its functions were devolved on the Revenue, Education and Medical Departments, so far as the funds allocated to the departments were concerned.

The District Board, constituted under the above Regulation, consisted of seven official members, the Talukdar being the *ex-officio* president and seven non-official members nominated by the Government. The Taluk Boards were subordinate to the District Board and consisted of four officials, including the Tahsildar, and four non-official members nominated by the

Government on the recommendation of the District Board. The power of nomination to Taluk Boards was delegated to the Subedars who were in charge of revenue divisions.

Later measures

A Local Cess Act was enacted in 1900 and was subsequently amended in 1908, 1910 and 1940 to suit the changing conditions. Although the constitution of Municipal and Town Committees was envisaged in the Local Cess Act of 1900, such committees did not come into existence till as late as 1934. Instead, the Taluk and District Boards were functioning as Municipal Committees. During 1934, the State Government sanctioned the construction of Municipal Committees with a non-official majority for all the district headquarters towns and other bigger towns, while rules for setting up Town Committees in smaller towns were also framed. The Municipal Committees so formed consisted of a president (Senior Revenue Officer), twelve non-official members and three official members.

The outstanding feature of the local fund administration during the period was the combination of the district and town finances with the unavoidable result that the expenditure on towns, and specially the headquarters towns, was met from the funds collected in the villages. Even in 1913, it was observed that one of the causes of complaint at the time of the institution of Local Boards was that the local funds were mostly spent at the headquarters of the district to the neglect of the tahsils. Although the local cess was collected from the villages, only a negligible amount was spent for the benefit of the villages. Even between 1921 and 1928, the position was no better. It was realised then that no improvements could be expected as long as the income from the cess collected from the raiyats continued to be utilised for expenditure in the towns. A preliminary step was taken during 1929 to separate the district and town budgets whereby it became impossible for District Boards to spend any but the allotted contribution from the local funds on the towns. Thus, more money became available for expenditure in villages since 1930.

During 1941-42, the following regulations were enforced for purposes of better administration of local self-government bodies : (1) The Hyderabad District Boards Act, (2) The Hyderabad Municipal and Town Committees Act, (3) The Sanitary Powers Act, (4) The Hyderabad Village Panchayats Act and (5) The Local Authorities Loans Act. With the promulgation of these Acts, the administration of the Local Government Department entered a new phase of development. The Regulations provided for elections to local bodies on the basis of interests and also for nomination of members in the following proportions : (*a*) in the case of District Boards, for every five elected, three nominated

members, and (b) in the case of Municipal Committees, for every two elected, one nominated member. Provision was also made for the constitution of interim District Boards and Municipal Committees consisting solely of nominated members till elections were held. The Acts passed in 1941-42 gave wider scope to the local bodies for the levy of local taxes and for building up stable local finances. Although the local bodies consisted only of nominated members, some progress was made in the general administration of the local self-governing institutions. Till 1946, the Local Government Department was a branch of the Secretariat of the Revenue Department. With the expansion of the activities of the Local Government Department, it was considered expedient to establish a separate Secretariat for the purpose. Accordingly, a separate Local Government Secretariat came into existence in 1946.

Progressive steps

The need for separating the administrative and executive functions of the local bodies is now widely recognised all over the country. The Taxation Enquiry Commission had recommended that a State cadre of Municipal Executive Officers should be formed in each State and that only competent persons with the requisite qualifications should be recruited. In the first Local Self-Government Ministers' Conference held in New Delhi in 1948, a resolution was passed recommending a State-wide cadre of service for local bodies. The Government of the old Hyderabad State had recognised the principle of separation of the executive from the administrative functions of the local bodies as early as 1940 when a separate service known as the Dominion Cadre Service was established and a separate fund called the Dominion Cadre Fund was constituted.

Statutory provisions were made in the local enactments for a contribution of $12\frac{1}{2}$ per cent from the income of local bodies towards the central charges of the service. Later, the nomenclatures of Dominion Cadre Service and Dominion Cadre Fund were changed into 'Local Government Service' and 'Local Government Service Fund,' respectively. All important executive posts were brought under the Local Government Service which was directly under the administrative control of Government. All Executive Officers of Municipalities, Licence and Taxation Officers, Court Inspectors, Assistant Medical Officers of Health, Sanitary Inspectors and Health Visitors were brought under the service. The executive functions of the City and Town Municipalities were carried on by the Executive Officers under whom other officers worked.

After 1948, there was a persistent demand for replacement of old Acts by progressive Acts in consonance with the spirit of the times and the replacement of nominated local bodies by elected

local bodies, so that democratic units of administration might begin to function and cater to the needs of the public in a responsible manner. The necessity for enactment of two new Acts was realised by the Government and the following Acts were enacted: (1) Hyderabad Municipal Corporation Act of 1950 and (2) Hyderabad Municipal and Town Committees Act of 1951. With the enforcement of these new Acts, elections were held to constitute fresh Town Municipalities. For the first time in the history of the local self-governing institutions in the State, the system of adult suffrage was introduced in the elections held during 1952-53. Soon after the popular Ministry took charge, a progressive measure, *viz.*, the Hyderabad District Boards Bill, was introduced in the Legislative Assembly in 1952 and it was passed in the year 1955. A new Act called the Hyderabad District Municipalities Act was also passed in the year 1956. But due to changes in the structure of the State, the new regulations had not been implemented by all the municipalities. In 1956, there were three City Municipalities in the district at Raichur, Koppal and Gangavati and six Town Municipalities at Sindhanur, Manvi, Kushtagi, Deodurg, Mudgal and Lingsugur. Elections were held last in 1960 under the old Act and the re-constituted municipalities were functioning since then.

Mysore Municipalities Act, 1964

In order to bring about uniformity throughout the new Mysore State in respect of municipal administration, a new measure called the Mysore Municipalities Act of 1964 was passed, which came into force from 1st April 1965. This new enactment has introduced several changes in various aspects of municipal administration.

According to Section 11 of the new Act, the number of councillors to be elected is 15 if the population of a town does not exceed 20,000, including one reserved seat for women and one for Scheduled Castes. The new Act also provides for an increase of four members for every 10,000 of population in excess of 20,000. Section 42 (ii) of the new Act provides that the term of office of the president and the vice-president may be four years. However, if the Municipal Councils concerned so decide, elections to the office of the president and vice-president may be held every year. Under Section 340 of the new Act, the Chief Officer has the right to attend the meeting of the Municipal Council or any Committee of the Council and take part in the discussions, but without, of course, the right to move any resolution or to cast a vote.

While according to the Hyderabad Municipal and Town Committees Act of 1951, specific powers were not conferred upon Municipal Commissioners and Chief Officers to accord permission for construction of buildings and collection of dues, according to

Sections 330 and 338 of the new Act such powers are vested in the Municipal Commissioners and the Chief Officers. While the sources of income were limited as per the Hyderabad Act of 1951, the new Act of Mysore has made comprehensive provisions for levying taxes and rates. In connection with providing any amenities to the public and taking up any developmental works, the municipalities had to obtain a specific Government order as per the Hyderabad Act of 1951. But the new Act of 1964 has conferred necessary financial powers on the Municipal Committees in this respect. Elections to the municipalities are now being held and the Municipal Councils being re-constituted under the provisions of the new Act. There are now one City Municipal Council at Raichur and eight Town Municipalities at Koppal, Gangavati, Sindhanur, Manvi, Kushtagi, Deodurg, Mudgal and Lingsugur. At present, Raichur is the only town in the district with a population of more than 50,000.

Raichur City Municipality

Raichur city, being the district headquarters, is fairly big with an area of four sq. miles. As per the 1961 census, the population of the city was 63,329. The Municipality was first set up in the year 1931 under the Local Cess Act of 1900 of the former Hyderabad State. There were 15 members, of whom 12 were non-officials and three officials, the District Collector being the *ex-officio* Chairman of the Committee. The first body elected on the basis of adult suffrage was constituted in the year 1952 under the Hyderabad Municipal and Town Committees Act of 1951. Again, the Municipality was re-constituted in the year 1960 under the Hyderabad District Municipalities Act, 1956. With the promulgation of the uniform Mysore Municipalities Act of 1964, elections were again held in 1969 under the new Act. The present Municipal Council has 31 seats, four of which are reserved for Scheduled Castes and two for women.

In the past, the Raichur city had been facing an acute problem of drinking water and for want of protected water, the people used to suffer from guinea-worm and other water-borne diseases. The main source of water to the city was wells—public and private—which could not cope up with the increasing needs of the people. Later, the Municipality thought of getting water from a source other than wells and resolved to draw its water supply from the Krishna river which flows at a distance of only 13 miles from Raichur. Under the Hyderabad Government, a scheme was taken up at an estimated cost of Rs. 11,67,730 with the object of supplying ten gallons of water per head for 40,000 people. The scheme called the Silver Jubilee Water Works was put through and the Works were inaugurated in the year 1936 at Devarsugur. The water was being supplied through pipes, following the process of cleaning, filtering and chlorinating. As this was also found inadequate to the needs of the growing city, a

remodelled scheme of water supply was taken up in 1966-67 at an estimated cost of about Rs. 9.48 lakhs, and was completed in 1968-69. At present, water is being supplied at the rate of 18.4 gallons per head and even this is being felt inadequate owing to the rapid increase in population. As in April 1969, there were 3,074 pipe connections and 422 stand posts in the city.

Comprehensive water supply scheme

With a view to meeting the increased needs of water for the growing population of the city, the Municipality has taken up yet another comprehensive water supply scheme at an estimated cost of Rs. 67.5 lakhs, the source of water for this scheme being the Tungabhadra Canal near Rampur, at a distance of two miles from Raichur. The scheme, having been duly approved by the Government, the foundation-stone for the same was laid on 28th April 1968. For the implementation of the scheme, the Municipality has raised a loan of Rs. 43.33 lakhs from the Life Insurance Corporation of India. There is no underground drainge and the city is served by surface drains. The municipal authorities have sanctioned a sum of Rs. 25,000 for an underground drainage scheme, which has also been taken up along with the comprehensive water supply scheme. In order to prevent stagnation of water at important places, the Municipality has taken up construction of new surface drains. During the four years from 1965-66 to 1968-69, the Municipality had spent Rs. 1,38,958 on the drainage works.

The Municipality is not running any educational institutions, but is extending all possible help towards the development of education. So far, it has given free sites in eight different areas of the city for construction of school buildings and has spent Rs. 47,740 towards construction of seven class rooms in various schools. It is running a good library and maintaining seven parks. Of these, the Mahaboob Gulshau is the oldest park. The others are the Gandhi Park, Ramashala Park, Library Park, Ganganivasa Park, park opposite to Sath-Kacheri and Devarsugur filter-bed park. The City Park (*i.e.*, Mahaboob Gulshan) along the Station Road is the largest one, with an area of 15 acres, which contains also the Nehru Children's Park and which is equipped with play things worth Rs. 5,000 donated by the Rotary Club. A rest house is also being maintained by the Municipality. The Municipality sanctioned varying amounts of grants to the (1) Kranti Club, (2) Karnataka Sangha and (3) Pharmacy College during 1968-69.

Health and sanitation

There were six Sanitary Inspectors in the Municipality, as in April 1969, to look after the sanitation of the city. They are assisted by 100 male labourers, 90 female labourers and 35 scavengers. A Junior Sanitary Inspector has been exclusively posted for the vaccination work. A record of births and deaths

is maintained by the Municipality by obtaining the information through the Sanitary Inspectors of different circles and medical institutions. There are 19 public latrines, 12 public urinals and 158 dust-bins. Two lorries, two tempos and one tractor are being maintained for removing the refuse. Since the present staff strength is found inadequate, the Municipality has a proposal for creating sixty more posts for further improvement in sanitation.

Roads

The City Municipality has under its jurisdiction the following types of roads :—

(1) Cement-Concrete roads	..	2.60 miles
(2) Metal roads	..	5.32 miles
(3) Asphalt roads	..	6.00 miles
(4) Murram roads	..	5.72 miles

With a view to keeping the roads and lanes free from dust, an important programme of paving them with Shahabad slabs has been taken up and 17,800 sq. metres of streets and lanes have been thus paved so far.

The road works were being executed through the State Public Works Department prior to the sanction of a Municipal Engineer to this city. Now the Municipality itself is carrying on this work under the supervision of the Municipal Engineer. For this purpose, it has purchased a new diesel road roller at a cost of Rs. 55,600. For the construction of roads, the amount spent during the four years from 1965-66 to 1968-69 was Rs. 2,28,816.52, as follows :—

1965-66	1966-67	1967-68	1968-69
Rs. P.	Rs. P.	Rs. P.	Rs. P.
43,076.53	57,721.00	57,381.68	70,637.31

In April 1969, there were 2,746 street lights in the city, of which 650 were tube lights, 103 were Asra lights and the rest ordinary lights. The Municipality has decided to fix further 300 tube lights during the year 1969-70.

Income

The sources of income of the Municipality are the octroi, building tax, water tax, toll tax, vehicle tax, entertainment tax, land, building and travellers' bungalow rents, income from gardens, sale and auction of land, boring fees, sale of manure, market fees, income from the cattle pound, slaughter house and weekly bazaar, building permission fees, licence fees, auction of bus stand hotel, profession tax, fines, projection fees, betterment charges, etc. About 11 years ago, its income was Rs. 5,15,454.33

while the expenditure was Rs. 3,95,598.89. As against this, the income and expenditure of the Municipality for the latest year, *i.e.*, 1968-69, were Rs. 22,56,422.19 and Rs. 14,01,966.15 respectively. Besides its own sources of income, it also received Government grants to the tune of Rs. 53,000 during the years from 1964-65 to 1967-68, out of which it expended Rs. 17,360. A comprehensive table indicating the principal heads of income and expenditure for the year 1968-69 is given below :—

	Receipts from		Rs. P.
1.	Octroi	..	13,82,958—85
2.	Building tax	..	2,44,428—91
3.	General water tax	..	73,670—81
4.	Toll tax	..	30,963—70
5.	Vehicle tax	..	43,613—27
6.	Cattle pound	..	1,619—27
7.	Entertainment tax	..	1,44,159—01
8.	Duty on T.P.	..	19—00
9.	Land rent	..	2,957—00
10.	Building rent	..	2,109—81
11.	Rent of T.B.	..	399—00
12.	Income from gardens	..	426—00
13.	Sale and auction of land	..	20,554—94
14.	Sale of water	..	1,39,212—05
15.	Boring fees	..	2,426—52
16.	Fines and miscellaneous	..	4,413—73
17.	Sale of manure	..	11,633—00
18.	Auction of pig manure	..	7,001—00
19.	Osmania and Station markets	..	24,050—00
20.	Slaughter house	..	2,806—25
21.	Weekly bazaar	..	8,800—00
22.	Building permission fees	..	20,104—25
23.	Licence fees	..	6,781—00
24.	Auction of bus stand hotel	..	..
25.	Profession tax	..	..
26.	Fines	..	3,476—04
27.	Projection fees	..	25,790—00
28.	Betterment charges	..	52,048—25
	Total	..	22,56,411—66

	Expenditure on		Rs. P.
1.	General administration	..	3,61,696—78
2.	Electricity and purchase of bulbs, etc.		1,07,938—46
3.	Public health	..	2,88,788—32
4.	Conservancy	..	3,78,851—06
5.	Epidemics	..	922—26
6.	Slaughter house	..	1,493—00
7.	T.B. (Sarai)	..	3,378—33
8.	Gardens	..	39,574—13
9.	Festivals	..	488—63
10.	Public works	..	1,20,685—96
11.	Library, games articles and allowance to Physical Instructor.		2,733—56
12.	Government grants and contributions.		40,105—51
13.	Miscellaneous	..	55,310—15
	Total	..	14,01,966—15

The different types of vehicles licensed by the City Municipality as in April 1969 were :—

1.	Private cycles	..	..	2,296
2.	Hiring cycles	..	..	499
3.	Government cycles	..	..	17
4.	Rickshaw taxies	..	..	500
5.	Single bullock carts	..	..	434
6.	Double bullock carts	..	..	36
7.	Private carts	..	..	5
8.	Private tongas	..	..	2
9.	Taxi tongas	..	..	31
10.	Four-wheeled carts	..	..	26

Development Plans

With a view to improving the city of Raichur and to providing better civic facilities to the residents, the Municipal Council sanctioned a four-year plan in October 1968. When this scheme is implemented, it is expected that the historic city of Raichur would gain a new and better look. These works are estimated

to cost about Rs. 1.65 crores and the following various types of works are proposed to be taken up :—

Sl. No.	Proposed works	Estimated cost
		Rs.
1.	Construction of residential quarters.	17,50,000
2.	Construction of Municipal Pravasi-Mandir.	2,00,000
3.	Construction of markets ..	11,00,000
4.	Construction of City Hall ..	3,50,000
5.	Construction of Stadium ..	3,00,000
6.	Construction of Swimming Pool ..	2,00,000
7.	Construction of Municipal Office buildings.	1,50,000
8.	Formation of children's parks ..	1,00,000
9.	Widening of roads and asphalting them.	15,00,000
10.	Formation of road circles ..	2,00.000
11.	Construction of public utility works.	6,50.000
12.	Avenue plantation and city survey...	50,000
13.	Construction of open drains ..	6,00,000
14.	Construction of Tonga and Rickshaw stands.	75,000
15.	Electrification of new extensions and road circles.	3,00.000
16.	Acquisition of lands for extension of the city.	7,00,000
17.	Roads for extensions ..	5,00,000
18.	Drainage for extensions ..	3,00,000
19.	Pavement to narrow lanes ..	5,00,000
20.	Machineries ..	2,00,000
21.	Comprehensive water supply ..	67,00,000
22.	Miscellaneous ..	75,000
	Total ..	1,65,00,000

Koppal Town Municipality

Prior to 1951, the civic affairs of Koppal town were being administered by a Municipal Committee entirely nominated by the Government. Under the Hyderabad Municipal and Town Committees Act, 1951, it was envisaged to set up an elected body with the addition of a small number of nominated members. Accordingly a new Council was constituted in May 1952 with 24 members, of whom 17 were elected and seven nominated including the Tahsildar, the Medical Officer and the Public Works Supervisor. Under the 1951 Regulation, for the first time, the town had an elected president. The Municipal Council of the town was reconstituted on 1st June 1960 under the Hyderabad District

Municipalities Act, 1956. Elections for the third time were held in February 1964, and for the fourth time in December 1968 as per the Mysore Municipalities Act, 1964. It is a fairly big town. As per the 1951 Census, the population of the town was 17,314 and as per the 1961 Census, it was 19,530 and the present population of the town is estimated to be approximately 26,000. The area of the town is 2.9 square miles while the number of houses in it is 4,585.

The present Council has 15 seats, out of which one is reserved for Scheduled Castes and one for women.

The municipal area has three miles of metal road, one mile and four furlongs of tar road and two miles and three furlongs of murram road. Besides a good number of Mysore State Road Transport Corporation buses, it is stated that about 600 cycles, nine lorries, eight private cars and ten jeeps ply in the municipal limits every day.

There are two Sanitary Inspectors to look after the sanitation of the town. The conservancy staff consists of 48 persons. A lorry has been purchased recently for the removal of refuse.

As in April 1969, there were 595 ordinary electric street lights and 45 fluorescent lights in the town.

The town is being supplied with protected water, the scheme of which was completed in the year 1963-64 at an estimated cost of Rs. 12.43 lakhs. In April 1969, there were 520 private connections and 50 public taps.

The main sources of income of the Municipality are property tax, profession tax, entertainment tax and octroi. The income and expenditure of the Municipality during the past five years from 1964-65 to 1968-69 were as given below :—

Year		*Income*	*Expenditure*
		Rs.	Rs.
1964-65	..	1,66,503	1,85,415
1965-66	..	2,25,005	1,91,631
1966-67	..	2,74,471	2,45,305
1967-68	..	2,84,739	3,38,766
1968-69	..	3,33,617	2,74,208

Gangavati Town Municipality

A Municipality was first constituted at Gangavati on 12th December 1953, with elected members under the Hyderabad Municipal and Town Committees Act, 1951. For the second

time, it was reconstituted under the Hyderabad District Municipalities Act, 1956. The present body was formed under the Mysore Municipalities Act, 1964. The Council consists of 15 elected members of which 13 seats are general ones, one reserved for Scheduled Castes and another for women.

As per the 1951 Census the population of the town was only 16,263 and it had increased to 19,026 by 1961. The present population is estimated to be about 25,000. The area of the town is 4½ square miles. The Municipality is maintaining two miles of metal road and one mile of tar road. The town is served by two-and-a-half miles of surface drains. The Municipality is evincing a keen interest in electrifying the town. At the end of 1964, there were 525 street lights of which 15 were mercury vapour lamps, 160 tube lights and 350 ordinary lights. To look after the sanitation of the town, there were two Junior Sanitary Inspectors assisted by a staff of five peons, 30 male labourers, 39 female labourers and six scavengers. A tractor and a tempo were maintained for the removal of refuse; recently, a lorry was also purchased for this purpose. The Sanitary Inspectors also attend to the work of vaccination, inoculations and prevention of food adulteration in the town.

The main source of water supply to the town is the left bank main canal of the Tungabhadra Project. The Council has decided to undertake a water supply scheme at an estimated cost of Rs. 12.5 lakhs in order to provide protected water. Along with it, it has also intended to take up an underground drainage scheme.

The Municipality is contributing a sum of Rs. 5,000 annually to Sri Kottureshwara Vidya Vardhaka High School. It has formed a park called the Nehru Memorial Park, which is being well-maintained with 75 varieties of decorative plants. Besides, it is maintaining a reading room well-supplied with daily newspapers, magazines and periodicals in different languages.

For providing surface drains to all the localities in the town, it has spent about five lakhs of rupees so far. Roads to a length of about ten miles have been formed in the town and several main roads have been black-topped.

The various sources of income of the Municipality are octroi, toll, vehicle and animal tax, weekly bazaar tax, entertainment tax, tax on transfer of immovable properties, building and land rent, meat market rent, sale of land, slaughter house fee, fines, sale of town refuse, building permit fee, licence fee, etc. The incidence of taxation for the year 1968-69 was about Rs. 38 per head. The

receipts and expenditure of the Municipality for the past five years from 1964-65 to 1968-69 are as given below:—

Year		*Receipts*	*Expenditure*
		Rs.	**Rs.**
1964-65	..	2,51,633	1,97,072
1965-66	..	3,52,346	3,56,133
1966-67	..	3,20,841	5,17,076
1967-68	..	9,23,306	7,33,394
1968-69	..	7,13,309	8,61,367

Sindhanur Town Municipality

A Town Municipality was first constituted at Sindhanur in November 1953 under the Hyderabad Municipal and Town Committees Act, 1951. The same body continued in power till 1961 under the Hyderabad District Municipalities Act, 1956. Elections were held in 1961 and the Municipality was re-constituted. Again, it was re-constituted in 1964 for the third time and since then it has been functioning as per the new Mysore Municipalities Act, 1964.

The area of the town is one square mile and its population in 1961 was 9,455 and the present population is estimated to be about 15,000. There are six wards in the Municipality with 21 blocks. The town has no protected water supply at present. The main sources of water have been wells and the stream flowing nearby. During summer, the residents face hardships and sometimes there have been cases of cholera attack owing to use of unprotected water from the stream. Recently, the Government have sanctioned a water supply scheme, under the National Rural Water Supply Programme, at an estimated cost of Rs. 4.64 lakhs, the main source of water for the scheme being the Tungabhadra *nala* flowing adjacent to the town. The work of this scheme is now in progress.

Prior to 1964, the Municipality used to put up about a dozen petromax lights in the main bazaar and about 30 lanterns in the other localities of the town. Electricity was first supplied to the town in 1964 and, as in April 1969, there were 250 electric street lights in the town. The Municipality has under its jurisdiction 3-¾ miles of metal road and 1½ miles of tar road. There is a Junior Sanitary Inspector to look after the sanitation of the town. He is assisted by a conservancy staff consisting of 10 female sweepers, two male labourers, two male scavengers and one female scavenger.

The Municipality has started a girls' high school from the school year 1969-70. It is planning to extend the town in all directions keeping in view its rapid growth owing to the central

position it occupies in the Tungabhadra Project area; it is also considering proposals for construction of a town hall and municipal library, establishment of a regulated market and a vegetable market, pavement of roads and lanes and providing of drains, wherever possible, and construction of quarters for scavengers and sweepers.

The sources of income of the Municipality are property tax, profession tax, vehicle and animal tax, entertainment tax, transfer of property tax, tax on motor vehicles, vegetable market fee and weekly bazaar fee, cattle pound, licence fees, building permit fees, octroi, etc. The receipts and expenditure of the Municipality for the last five years from 1963-64 to 1967-68 were as follows:—

Year		*Receipts*	*Expenditure*
		Rs.	Rs.
1963-64	..	49,331	53,007
1964-65	..	84,753	64,448
1965-66	..	65,866	70,456
1966-67	..	88,277	62,126
1967-68	..	93,351	70,288

Manvi Town Municipality

The Manvi Town Municipal Council was first constituted under the Hyderabad Municipal and Town Committees Act, 1951. Then there were 18 members—12 elected and six nominated. The present body was constituted under the Mysore Municipalities Act, 1964. The area of the Municipality is 5.5 square miles. As per the 1961 Census, the population of the town was 8.715 which is estimated to have increased to about 12,000 by April 1969. There are now five territorial divisions, with 2,616 houses, in the town. The Municipality maintains 181′ of cement road, 3,230′ of murram road and 750′ of water bound macadam road. In April 1969, there were 100 bicycles, six lorries, 10 jeeps and 25 tractors in the town.

The main source of water supply to the town is a tank situated nearby, from which water is drawn and supplied through taps. It maintains a park and a children's play-ground. Its receipts and expenditure during the three years from 1966-67 to 1968-69 were as under:—

Year		*Receipts*	*Expenditure*
		Rs.	Rs.
1966-67	..	54,080	62,763
1967-68	..	75,476	90,911
1968-69	..	61,070	61,874

Kushtagi Town Municipality

A Municipal Council was first constituted for the Kushtagi town on 14th December 1953 under the Hyderabad Municipal and Town Committees Act, 1951. There were then 10 elected members and five nominated members. The present Municipal Council was constituted in February 1969 as per the Mysore Municipalities Act, 1964.

The area of the town is about 1.3 sq. miles, while its population, as per the 1961 Census, was 7,204 and it had increased to about 10,100 by 1969. There are four blocks in the town with about 1.500 houses. Wells are the main source of water supply to the town. In 1969, there were 180 electric street lights in the place. While the income of the Municipality was Rs. 26,567 about 10 years ago (*i.e.*, in 1957-58), it had increased to Rs. 47,657 by 1967-68; similarly, while the expenditure in 1957-58 was Rs. 18,853, it had also increased to Rs. 31,177 by the year 1967-68. The Municipality is maintaining a garden. The town is being extended gradually.

Deodurg Town Municipality

The population of the Deodurg town, as per the census of 1961 was 8.560 and the present population is approximately 10,000. The town has an area of one and-a-half square miles. Its Municipality with 11 elected and six nominated members was inaugurated on the 26th December 1953, as per the Hyderabad Municipal and Town Committees Act of 1951. The present Council was constituted under the new Mysore Municipalities Act of 1964, in February 1969. There are five divisions in the town with 2,159 houses. The Municipality is maintaining two-and-a-quarter miles of metal road, half-a-mile of murram road and a mile of black-topped road. As in April 1969, there were 196 electric street lights in the town.

The receipts and expenditure of the Town Municipality during the year 1957-58 were Rs. 26,311 and Rs. 29,566 respectively. During the recent three years, *i.e.*, from 1966-67 to 1968-69, the corresponding figures were :—

Year		*Income*	*Expenditure*
		Rs.	Rs.
1966-67	..	52,019	39,829
1967-68	..	60,525	77,629
1968-69	..	40,144	49,630

Mudgal Town Municipality

The population of the Mudgal town, as per the 1961 Census, was 8,916 and it had increased to about 10,500 by 1969. The area of the town is 2.5 square miles and there are five wards and 15 blocks with 2,500 houses. Under the Hyderabad Municipal

and Town Committees Act, 1951, a Municipal Council was constituted for the town on the 17th December 1953 with 12 elected and six nominated members. The present body was constituted in February 1969 under the new Mysore Municipalities Act, 1964.

The Municipality has, under its jurisdiction, two-and-a-half miles of metal road and four miles of murram road. The town is served by surface drains. There were 18 drinking water wells and 162 electric street lights as in April 1969. The income and expenditure of the Town Municipality about 10 years ago (*i.e.*, in 1957-58) were Rs. 13,858 and Rs. 10,243 respectively and the figures for the recent three years from 1966-67 to 1968-69 were as follows :—

Year		*Income*	*Expenditure*
		Rs.	Rs.
1966-67	..	30,987	46,823
1967-68	..	37,337	44,036
1968-69	..	22,369	27,390

Lingsugur Town Municipality

The present population of the Lingsugur town is about 11,000, while it was 9,565 as per the 1961 Census. The area of the town is 5.5 square miles. The Town Municipal Council was first constituted in 1953 under the Hyderabad Municipal and Town Committees Act, 1951, with 12 elected and six nominated members. The present Council was constituted in February 1969 under the new Mysore Municipalities Act, 1964. The Municipality is maintaining two miles of metal road and a mile of tar road. As in April 1969, there were 27 drinking water wells, besides a big tank adjacent to the town, which serves the needs of water supply to the people of the town. A new scheme for supplying protected tank-water through taps was in progress during July 1969. The streets are provided with 180 ordinary electric lights, 12 mercury vapour lamps and 16 tube lights.

Whereas in 1957-58, the income of the Municipality was Rs. 25,027 and expenditure Rs. 25,190, the corresponding figures during the recent three years from 1966-67 to 1968-69 were as under :—

Year		*Income*	*Expenditure*
		Rs.	Rs.
1966-67	..	64,163	43,560
1967-68	..	41,161	63,626
1968-69	..	58,314	55,870

District Board

A District Board was first set up at Raichur in accordance with the Dastoorul-mal (Regulation) of 1889, which envisaged the constitution of Taluk and District Boards. An year earlier, to the constitution of District Boards, local cess, at the rate of one anna in the rupee of land revenue, was collected in the *Khalsa* areas of the State. The jurisdiction of the Raichur District Board covered only the rural areas. The Board was reconstituted in 1956 under a notification of the Hyderabad Government dated 1st October 1956 and it was governed by the Hyderabad District Boards Act, 1955 (Act 1 of 1955). There were 23 nominated members on the Board, out of whom five were officials and 18 non-officials. The Deputy Commissioner of the Raichur district was its *ex-officio* president. An Executive Officer looked after the day-to-day administration. He was assisted by an Executive Engineer, a Local Engineer and three Supervisors.

The District Board maintained its own engineering establishment. Under Section 80 of the District Board Act referred to above, construction, repairs and maintenance of roads, planting and preservation of trees along the roads. maintenance of markets, repairs of wells and tanks, maintenance of cattle pounds and ferries, location of village sites, vaccination and sanitary arrangements in *Jatras* and *Urses* and maintenance of primary school buildings were the special responsibility of the Board. Under Section 81 of the Act, there were certain discretionary powers vested in the Board like the development of co-operatives, preservation of cattle and other livestock, maintenance of public parks, libraries and reading rooms, child welfare and marketing. The Board was maintaining all approach roads to villages within a length of two miles. In 1957-58, the Board had spent Rs. 11,760 on construction and maintenance of such roads.

The main sources of income of the Board were the local cess, fees on ferries, tax on property and lands and fees on cattle pounds. The local cess was collected at the rate of two annas per rupee of land revenue. During revenue collections, the village officers were paid a special commission of 3 per cent of the collections for attending to this item of work. In 1957-58, the Board derived its income under the following heads :—

		Rs.
Local cess	..	2,06.743
Entertainment tax	..	3,159
Fee collections	..	10,615
Property and lands	..	16,801
Ferries	..	25,113
Grants	..	15,000
Cattle pound	..	6,879
Other fees	..	487
Miscellaneous	..	530
Debit account	..	2,079

A total income of Rs. 2,87,406 was derived in that year. The balance at the disposal of the District Board, on 1st April 1957, was Rs. 7,29,655 while the balance at the close of the year 1957-58 was Rs. 6,89,011. In 1957-58, the Board spent Rs. 11,626 as administrative charges, Rs. 9,314 on public works, Rs. 33,709 on education, Rs. 35,507 on public health and sanitation, Rs. 3,873 on miscellaneous items and Rs. 3,307 on debit charges. A sum of Rs. 1,26,078 was spent from the balance of previous year. The total expenditure during the year came to Rs. 3,28,050.

The Board was maintaining two bungalows for travellers, one at Gurgunta in Lingsugur taluk and the other at Bhanapur in Yelburga taluk. Three Ayurvedic Dispensaries were being maintained, one each at Yergera and Mangalur in Yelburga taluk and Hanamsagar in Kushtagi taluk. All these three dispensaries were started in 1957-58 and each one of them was getting Rs. 2,000 as grant out of the Board's budgetary provisions. The District Health Officer controlled these dispensaries. Though no schools were directly managed by the District Board, a sum of Rs. 20,630 was spent in 1957-58 for supply of furniture and books to several primary schools. Some school buildings were also maintained from out of the funds of the Board.

The Board had come forward with generous contributions to several capital works. A sum of Rs. one lakh had been given for the new civil hospital building at Raichur. Another sum of Rs. 30,000 was earmarked for the Laxmi Venkatesh Desai College building in Raichur. At the request of the Gulbarga Engineering College authorities, the Board also gave a sum of Rs. 25,000 to the college. The public health and vaccination work in the district was under the control of the District Medical Officer. The Board was also spending some money to pay for the Sanitary Inspectors and Vaccinators.

District Development Council

In accordance with the provisions of Section 187 of the Mysore Village Panchayats and Local Boards Act of 1959, a District Development Council was constituted for Raichur district on the 1st April 1960 in place of the former District Board. This body is presided over by the District Deputy Commissioner and the District Development Assistant functions as its secretary. The Council consists of members of Parliament elected from the district and members of the State Legislature, also elected from the district, presidents of all the Taluk Boards, officers of various development departments, together with a member of the Scheduled Castes and a lady member. The total number of members on the Council during 1967-68 was 39. It had three sub-committees, one each for (1) amenities, (2) agriculture and (3) social education and rural arts and crafts. Each committee met three times in that year.

The Council scrutinises and approves the budgets of the Taluk Development Boards and reviews their progress of work. It guides the various agencies in the implementation of plan and non-plan schemes relating to developmental works in the district. In short, it is an advisory and co-ordinating agency of all developmental works in the district.

Taluk Development Boards

Under the uniform Act of 1956 already referred to, Taluk Development Boards have been established, one for each revenue taluk, excluding the areas served by the town municipalities. The taluks having a total population of one lakh and above are provided with a Board consisting of 19 members. In other taluks, where the total population is less than a lakh, the Board consists of 15 members. The members of the Taluk Development Boards are elected on the basis of adult franchise. For purposes of election, the revenue taluk area is divided into a number of constituencies. Seats are reserved for the Scheduled Castes and Tribes in proportion to their population. On each Taluk Board, not more than two seats are also reserved for women. The Block Development Officers are the Chief Executive Officers of these Boards.

Under the relevant provisions of the Mysore Village Panchayats and Local Boards Act of 1959, the Taluk Development Boards have to supervise and guide the work of the panchayats. Effective co-ordination is envisaged between the panchayats and the Taluk Development Boards. Hitherto 25 per cent of the land revenue of the area was assigned by the Government to the Taluk Boards to help them to carry on the duties entrusted to them. But this percentage has been raised to 60 from 1969-70. The entire local cess on land revenue and the water cess collected in the area are also assigned to the Boards. The Taluk Boards have powers to levy duties and taxes, among other things, on transfer of immovable properties in the shape of an additional stamp duty, tax on animals brought for sale, etc. The total income and expenditure of the Taluk Development Boards in the district during 1967-68 were Rs. 29,48,012 and Rs. 22,80,758 respectively.

Elections

Elections to all the nine Taluk Development Boards were held in 1961 and also later in 1968. In the 1968 elections, 155 members were elected, of whom 17 belonged to the Scheduled Castes and Tribes and 14 were lady members. The following table shows the number of members in each of the Taluk Development Boards:—

Sl. No.	Taluk Board		No. of members	
		General	Reserved for Scheduled Castes and Tribes	Reserved for women
1	2	3	4	5
1.	Raichur	14	3	2
2.	Manvi	15	2	2
3.	Deodurg	12	2	1
4.	Lingsugur	15	2	2
5.	Sindhanur	12	2	1
6.	Kushtagi	13	1	1
7.	Koppal	15	2	2
8.	Gangavati	13	1	1
9.	Yelburga	15	2	2
	Total ..	124	17	14

Achievements

The Taluk Development Boards in the district have been, *inter alia*, attending to the formation of roads, construction and repairs of school buildings and minor irrigation works, maintenance of health unit-type of dispensaries, markets, pravasi mandirs, construction and repairs of public wells, etc. The allotment, expenditure and balance of budget for various items of works undertaken by the Taluk Development Boards for the year 1967-68 were as given hereunder :—

Sl No.	Item of work	Allotment	Expenditure	Balance
1	2	3	4	5
		Rs. P.	Rs. P.	Rs. P.
1.	Roads	2,00,227-00	74,403-00	1,25,823-23
2.	Primary school buildings ..	5,73,317-00	2,80,832-16	2,92,484-84
3.	Minor irrigation works ..	34,093-00	26,615-00	7,478-00

1	2	3	4	5
		Rs. P.	Rs. P.	Rs. P.
4.	Maintenance of 14 hospitals	13,70,935-00	10,95,458-29	2,61,476-71
5.	Veterinary dispensaries (only in Manvi, Deodurg, Lingsugur and Koppal taluks).	6,550-00	2,564-99	3,985-01
6.	Pravasi Mandirs	5,000-00	4,923-59	76-41
7.	Public wells, tanks and water works.	52,307-00	41,738-82	10,568-18
8.	Conferences and seminars on agriculture and industries.	9,679-00	7,799 00	1,798-00
9.	Social education	26,308-94	18,299-98	8,008-96
10.	Development of agriculture ..	51,500-00	30,271-66	21,228-34
11.	Measures for amelioration of Scheduled Castes.	73,500-00	44,367-15	29,132-85
12.	Maintenance of 18 Taluk Board High Schools.	3,39,277-00	2,28,926-00	1,10,351-00
13.	Scarcity relief works ..	500-00	400-00	100-00
14.	Contributions to institutions ..	53,903-00	19,709-88	34,193-12

Three tables showing the income, expenditure and financial position of the Taluk Development Boards in the district during the years 1968-69 are appended at the end of the chapter (*vide* tables 1, 2 and 3).

Panchayat Raj

Village Panchayat administration was introduced in Raichur district in 1942 with the enforcement of the Hyderabad Village Panchayats Act of 1942. Immediately after the enforcement of the Constitution of India Act, the Hyderabad Gram Panchayats Act, 1951, was ushered in, repealing the earlier Act to enable the Government to establish village panchayats on the basis of adult suffrage. Some of the salient features of the new Act were: (1) the population limit for the establishment of a panchayat was lowered from 2,500 to 1,000; (2) the system of selection of panchayat members by Collectors was replaced by direct election by the people on the system of adult franchise; (3) appointment of Executive Officers (*Karbharis*) for the day-to-day administration; (4) provision of fifteen per cent of the land revenue of the village plus 33 1/3 per cent of the local cess to finance the

panchayats; and (6) provision for the constitution of Nyaya Panchayats in the villages.

Due to financial difficulties, the then State Government was not in a position to contribute, as prescribed, 15 per cent of the land revenue to the panchayats and, as a measure to restrict the expenditure on this account, it was decided that no new panchayats should be established until the State finances improved. Till the end of 1952-53, no new panchayats were formed. But this state of affairs could no longer be allowed to continue, nor was it desirable to damp the enthusiasm of the rural people who were anxious to have village panchayats. It was, therefore, decided that permission should be given to constitute village panchayats in such villages where the villagers undertook to run the panchayats without government help. The panchayats in the district were empowered to levy, with the previous sanction of government, house tax, profession tax, vehicle and animal tax, entertainment tax, *barbardari* tax, pilgrim tax, market fees, fees for the use of slaughter houses and fees for cattle stands.

Adult franchise

In all, there were about 160 village panchayats in the district of Raichur constituted under the Hyderabad Gram Panchayats Act, 1951 (Act VIII of 1951). Taluk-wise their numbers were as follows: Raichur—25, Manvi—18, Deodurg—14, Lingsugur—14, Sindhanur—9, Kushtagi—19, Koppal—18, Gangavati—14 and Yelburga—26. The adult franchise system was followed in the matter of electing members to the panchayats. One member for every 150 of the population was elected by all those who were empowered to vote. It was, however, laid down that the total number of members in the panchayat was, in no case, to exceed 12 and should in no case be less than six. Seats were reserved for Scheduled Castes and Tribes. The *Sarpanch* (President) and *Upa-Sarpanch* (Vice-President) were elected by the members. The panchayat elections were held once in three years.

The powers and functions of the village panchayats were laid down fully in the statute. In addition to undertaking various ameliorative duties, the panchayats had also to frame programmes for increased food production in the villages. The panchayat administration had, in particular, to supervise the reclamation of waste lands and bring such lands under cultivation, effect land reforms, set up granaries and warehouses, construct tanks, village roads, bridges, latrines, urinals, *dharmashalas*, *sarais* and *chhatras*, supervise maternity and child welfare measures and the like.

Under Section 164 of the Gram Panchayats Act, power was vested in the State Government to establish Nyaya Panchayats for the administration of criminal and civil justice in each village and groups of villages. No Nyaya Panchayats had, however,

been established. A proposal for the formation of 311 group panchayats covering 1,056 villages had been forwarded to government for sanction. Elections in 135 panchayats, under the new adult franchise system, had been completed between 1952 and 1954. In 25 panchayats, elections were still due. Taxes had been levied according to law in 96 panchayats. The total population covered by these 160 panchayats was 2.90,543. They together had 830 elected members and 210 nominated members.

Financial position

The village panchayats collected Rs. 89,412 by way of taxes on houses, lands and general property in 1957-58, Rs. 21,288 by way of trade and profession tax and Rs. 15,025 by way of entertainment tax. The total tax amount for the year worked out to Rs. 1,25,725, the incidence of taxation per head of population being 60 paise. The State Government also gave a grant of Rs. 1,96,428.

As against this the panchayats spent, during that year, Rs. 33,637 for general administration and collection charges, Rs. 43,540 on lighting, Rs. 11,073 on water supply, Rs. 9,196 on drainage and sanitation, Rs. 36,606 on conservancy, Rs. 3,078 on medical and public health, Rs. 51,892 on roads and buildings and Rs. 8,426 on miscellaneous items.

Uniform measure

A new uniform Act for the regulation and administration of village panchayats and local boards in the new State of Mysore was passed by the Mysore Legislature in 1959 and this Act, called the Mysore Village Panchayats and Local Boards Act, 1959, came into force in the State in 1959 as already referred to earlier. As a result, the District Boards were abolished and a three-tier development oriented system of local self-governing institutions was introduced, consisting of Village Panchayats, Taluk Development Boards and District Development Councils. It was envisaged that a panchayat should be established in every village or a group of villages having a population of not less than 1,500 but not exceeding 10,000, and that each panchayat should have not less than eleven and not more than nineteen members with reservation of seats for Scheduled Castes in proportion to their population, two seats also being reserved for women in each panchayat.

The new Act constituted a progressive step in the direction of democratic decentralisation of the administrative set-up. It aimed at the panchayats and taluk boards becoming primary functionaries for all forms of development in the rural areas. The panchayats were assigned 35 per cent of the annual land revenue collections in their respective jurisdictions in order to help them to carry on the functions entrusted to them. Recently, Government have enhanced this percentage to 40.

The panchayat elections were held in this district, under the provisions of the new enactment, in February 1968 and 411 panchayats were re-constituted. These panchayats, covering a total population of 9,38,740, consist of 5.331 members including 599 members from Scheduled Castes and Scheduled Tribes, and 839 lady members. All the panchayats have their chairmen and vice-chairmen elected under the relevant provisions of the Act. A statement giving particulars about the re-constituted panchayats, taluk-wise, is given below :—

Sl. No.	Name of taluk	No. of village panchayats	No. of members elected and nominated	No. of Scheduled Caste and Scheduled Tribe members	No. of women members
1	2	3	4	5	6
1.	Raichur	49	616	78	96
2.	Manvi	46	606	65	95
3.	Deodurg	49	619	91	100
4.	Lingsugur	54	702	72	111
5.	Sindhanur	37	485	60	74
6.	Kushtagi	47	610	50	96
7.	Koppal	39	521	51	82
8.	Gangavati	41	527	51	84
9.	Yelburga	49	645	81	101
	Total ..	411	5,331	599	839

Achievements

During the year 1966-67, the panchayats in the Raichur district effected repairs to 78 drinking water wells at a cost of Rs. 21,836, to three cattle ponds at Rs. 1,623, to 18 roads at Rs. 23,746 and to eight drains at Rs. 7,702. During the same year, 46 drinking water well works were taken up at an estimated cost of Rs. 2 lakhs and 51 drinking water wells were completed and, in all, 101 villages were provided with drinking water wells. In the following year, *i.e.*, 1967-68, 50 drinking water wells were repaired at a cost of Rs. 93.698, five cattle ponds were repaired at Rs. 805, 37 road works estimated to cost Rs. 60,928 were taken up, 61 school buildings were repaired at Rs. 9,186 and 20 latrines were constructed at Rs. 1,958. During the year 1968-69, sums to the tune of Rs. 3,86,000 were allotted for taking up new well-works as well as for completing the incomplete ones.

Some of the panchayats were given financial assistance to create remunerative assets such as fish ponds, flour mills, model farms, fruit and vegetable gardens and printing presses. In this respect, six panchayats were sanctioned a sum of Rs. 11,150 as grant and Rs. 11,150 as loan for establishing six flour mills. For two model farms, Rs. 5,000 as grant and Rs. 5,000 as loan were sanctioned to two panchayats. For constructing a fish pond, Rs. 2,500 as grant and Rs. 2,500 as loan were sanctioned to a panchayat. For laying out a fruit garden, Rs. 1,676 as grant and Rs. 1,676 as loan were given to another panchayat. Yet another panchayat was paid Rs. 1,000 as grant and Rs. 1,000 as loan for laying out a vegetable garden.

Financial position

During the year 1966-67, a revenue of only Rs. 5,53,126 was collected by the panchayats as against an amount of Rs. 16,30,251 due to be collected. The expenditure incurred during that year was Rs. 16,89,771. A sum of Rs. 1,28,882 was collected towards fresh taxes levied during that year. During 1967-68, only in Lingsugur taluk fresh taxes amounting to Rs. 75,650 were levied and as against this, a total amount of Rs. 72,535 was collected in that taluk. As against an amount of Rs. 20,19,916 that had to be collected towards the panchayat taxes during that year, only an amount of Rs. 6,74,728 was collected, while the expenditure amounted to Rs. 15,60,094. A statement showing the demand, collection and balance of revenue of village panchayats in the district as at the end of February 1969 is given at the end of the chapter (*vide* table 4).

Panchayat Training Centre, Raichur

With a view to educating the rural leaders so as to enable them to play a more active and useful role in rural re-construction, a Panchayat Training Centre was established at Raichur in December 1965. This Training Centre, sponsored by the Karnatak Sangha, Raichur, is situated in the premises of the Sangha in Gajgarpet, Raichur, and has been rendering useful service in conducting two types of training courses, namely, institutional and peripetatic courses. In the year 1968-69, 205 and 817 persons of Raichur district were trained in these two courses, respectively. The former type, of course, is one of seven days' duration and is meant for the Taluk Board Members, Chairmen, Vice-Chairmen and part-time Secretaries of Panchayats, while the latter is of three days' duration meant for members of the panchayats. The 411 panchayats and nine Taluk Development Boards in Raichur district and 296 panchayats and eight Taluk Development Boards in Bellary district form the jurisdiction of this Training Centre. A sum of Rs. 40,042 was spent on these training programmes in 1968-69.

TABLE 1

Statement showing the income of Taluk Development Boards in Raichur district for the year 1968—69

Sl. No.	Name of Taluk Development Board	Land Revenue assigned by Government	Rates and taxes	Revenue derived from T.D.B. property and other sources	Miscellaneous	Education	Grants and contribution	Debt head	Total
1	2	3	4	5	6	7	8	9	10
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1.	Raichur	1,36,313	67,742	2,000	2,700	2,479	..	..	2,11,234
2.	Manvi	2,08,850	80,509	2,700	2,085	45,650	30,000	37,380	4,07,174
3.	Deodurg	1,07,745	18,906	13,965	2,591	3,400	34,124	55,300	2,36,031
4.	Sindhanur	1,45,980	76,740	6,000	11,050	13,500	1,72,000	16,200	4,41,470
5.	Kushtagi	56,382	38,925	3,100	1,500	2,500	1,500	7,000	1,10,907
6.	Lingsugur	48,560	34,000	1,350	15,000	40,000	16,805	72,071	2,27,786
7.	Gangavati	1,70,003	1,29,520	4,952	1,912	6,054	..	73,400	3,85,841
8.	Koppal	1,05,037	2,700	12,200	..	7,500	..	2,500	1,29,937
9.	Yelburga	1,06,585	42,000	3,400	3,300	3,000	..	18,800	1,77,085
	Total ..	10,85,455	4,91,042	49,667	40,138	1,24,083	2,54,429	2,82,651	23,27,465

TABLE 2

Statement showing the expenditure incurred by Taluk Development Boards in Raichur district during the year 1968—69

Sl. No.	Name of Taluk Development Board	General Admn.	Public works executed by Taluk Boards and P. W. D.	Public Health	Civic amenities	Education	Contributions and grant-in-aid	Miscellaneous	Debt head	Total
1	2	3	4	5	6	7	8	9	10	11
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1.	Raichur ..	63,281.04	2,82,438.84	50,567.48	441.66	36,118.41	7,150.75	29,107.37	30,066.35	4,99,171.90
2.	Manvi ..	44,470.80	1,95,224.85	43,158.30	300.00	53,150.67	4,005.50	11,857.12	96,250.27	4,48,417.51
3.	Deodurg ..	22,091.45	50,381.44	13,393.89	2,319.45	27,253.76	2,126.98	7,892.35	1,63,913.13	2,89,372.45
4.	Lingsugur ..	30,084.14	91,981.66	7,252.38	1,441.51	3,292.57	5,505.30	64,981.66	1,06,004.29	3,10,543.51
5.	Kushtagi ..	27,206.45	56,567.33	1,032.22	294.10	7,600.39	50.00	5,518.04	2,49,171.09	3,47,439.62
6.	Sindhanur ..	4,842.56	14,174.00	1,081.94	..	12.50	..	5,416.40	..	25,527.40
7.	Gangavati ..	35,216.77	1,24,315.49	70,488.88	1,266.80	16,130.56	22,450.00	12,975.22	1,27,773.42	4,10,617.14
8.	Koppal ..	47,803.17	72,658.57	15,656.35	838.55	5,516.91	9,441.00	52,099.00	63,961.35	2,67,974.90
9.	Yelburga ..	34,857.47	1,20,551.23	8,272.07	4,161.77	7,516.75	50.00	6,063.14	..	1,81,472.43
	Total ..	3,09,853.85	10,08,293.41	2,10,903.51	11,063.84	1,56,592.52	50,779.53	1,95,910.30	8,37,139.90	27,80,536.86

TABLE 3

Statement showing the financial position of the Taluk Development Boards in Raichur district for the year 1968—69

Sl. No.	Name of Taluk Development Board	Opening Balance	Income during the year	Total	Expenditure during the year	10 per cent savings	Balance
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1.	Raichur	2,90,102	3,90,004	6,80,106	5,89,729	39,000	51,377
2.	Deodurg	1,85,572	1,92,94[illegible]	3,78,517	3,56,600	19,300	2,617
3.	Manvi	4,47,318	3,15,311	7,62,629	5,56,275	31,500	1,74,854
4.	Lingsugur	1,34,371	2,44,560	3,78,931	3,29,099	24,500	25,332
5.	Sindhanur	2,08,940	2,09,707	4,18,647	3,61,700	41,864	15,083
6.	Kushtagi	1,96,387	2,20,972	4,17,359	3,74,900	22,100	20,359
7.	Koppal	4,43,428	1,72,506	6,15,934	4,30,320	17,250	1,68,364
8.	Gangavati	2,48,000	5,13,879	7,61,879	6,57,491	51,388	53,000
9.	Yelburga	1,71,350	1,76,780	3,48,130	2,41,923	17,700	88,507
	Total	23,25,468	24,36,664	47,62,132	38,98,037	2,64,602	5,99,493

TABLE 4

Statement showing the demand, collection and balance of panchayat taxes in Raichur district as at the end of February 1969

Sl. No.	Name of taluk	Demand			Total collections upto end of Feb. 1969	Balance
		Arrears	Current	Total		
		Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1.	Raichur ..	.. 1,26,122.24	36,000.00	1,62,122.24	28,615.42	1,33,506.82
2.	Manvi ..	.. 1,52,954.08	87,340.70	2,40,294.78	44,429.54	1,95,865.24
3.	Deodurg ..	.. 36,479.12	47,402.27	83,881.39	23,700.21	60,181.18
4.	Lingsugur ..	.. 2,33,719.86	75,650.57	3,09,370.43	58,899.41	2,50,471.02
5.	Sindhanur ..	.. 1,69,889.18	48,612.55	2,18,501.73	38,188.50	1,80,313.23
6.	Kushtagi ..	.. 86,356.00	90,836.01	1,77,192.01	64,335.47	1,12,856.54
7.	Koppal ..	.. 2,06,975.07	73,309.21	2,80,284.28	50,656.69	2,29,627.59
8.	Gangavati ..	.. 52,039.37	45,584.87	97,624.24	46,454.48	51,169.76
9.	Yelburga ..	.. 2,33,240.70	81,924.00	3,15,164.70	80,190.12	2,34,974.58
	Total ..	.. 12,97,775.62	5,86,660.18	18,84,435.80	4,35,469.84	14,48,965.96

CHAPTER XV

EDUCATION AND CULTURE

Education in early period

IN the early times, though education was highly esteemed, it was not regarded as a State concern. It was in the hands of religious leaders and priests and was also encouraged with endowments as a religious duty. As elsewhere in India, in the Raichur district too, the Vedic system of education was prevalent and it was closely connected with religion and ritualism. The teaching was mostly oral and the students had to obey the teacher implicitly; the curriculum included learning of grammar, literature, mathematics, logic, astronomy, philosophy, the Vedas and other religious lore, etc., and sometimes the arts of dancing, singing and other fine arts. The education of the Kshatriyas was more vocational than academic and included the use of arms and military training. The education of the Vaishyas and the agricultural classes was largely professional, the boy learning his trade from the father. Craft education was hereditary and children of craftsmen used to be trained in the crafts practised by their parents.

Education in later period

Many inscriptions and other old records throw light on the educational activities in the district during the later period. There were a good number of *agraharas* which were centres of learning in the district; of them, the famous ones were at Kuknur, Itgi, Madinur, Alawandi, Kurdi and Gabbur. The educational activities at those places were directed by profound scholars in the various branches. Students from far and near seeking knowledge used to study in these centres. These seats of learning enjoyed the patronage of prominent persons in the society including the rulers and businessmen. Grants were given to the institutions and various facilities were provided to pupils. Besides the *agraharas, Pashupatha-Shaiva Mathas* of the ancient days were also centres of learning, the famous ones being the Gavimatha of Koppal and the Narada-gadde and Rama-gadde Mathas. During the past several centuries, a number of Veerashaiva Mathas conducted schools and promoted education in this part of the State.

During the times of Muslim rule, classes were started for pupils in mosques and the system of education in them was closely connected with religion. The *maktab* was a primary school attached to a mosque where instruction was given to boys on portions of the *Koran* and the curriculum also included reading, writing and simple arithmetic. The *madrasah* was an institution of higher learning. The Bahmani rulers made ample provisions for the education of orphans and for the maintenance of teachers. Muhammad Shah (1463—1482), a patron of learning, built a fine library at Bidar, which contained about 3,000 volumes and attracted scholars from the Raichur area also. The curriculum for higher learning included law, logic, doctrines of Islam and metaphysics.

Modern Education

The Halifax despatch of 1854 was the starting point of western education during the days of the East India Company. The structure of education was mainly based on the plan formulated in that despatch. During the same year was founded the Dar-ul-Uloom by the far-sighted statesman, Nawab Sir Salar Jung Bahadur. In 1859, the Government of Hyderabad issued a notification ordering the opening of regular schools in each of the taluk and district headquarters and the management of these schools was entrusted to committees consisting of patels and patwaris, presided over by the tahsildars.

In the year 1869, the Education Department was established on a firm footing with the appointment of a Secretary to the Miscellaneous Minister in the Education Department and also a Director of Public Instruction. English education was first introduced in the district in 1873, when English was given the place of a subsidiary language. In the year 1874, Deputy Inspectors were appointed for all districts to whom were transferred most of the duties connected with educational matters. In the meanwhile, the whole system of education was re-organised dividing it into primary, lower secondary and higher secondary stages. In the year 1882, high schools were opened at the headquarters of all districts. Primary education was made free and a middle school examination was instituted in 1890. But it was twenty years later that a Higher Secondary Certificate Examination was held corresponding to the Matriculation Examination in other areas.

Among the non-official organisations which strove for the improvement of education in the eighties and nineties of the 19th century, mention may be made of St. Mary's Convent. It was started near Raichur Railway Station in 1887 and conducted by the Congregation of the Missionary Sisters of St. Ann of Providence. It is the oldest institution in Raichur district and, till 1957, it was only a middle school. In 1957, it was raised to the status of a high school for both boys and girls. Even now it is

one of the popular institutions in the district. The other two private agencies, which have been striving for improvement and spread of education in the district since the twenties of the 20th century, are the Hamdard Higher Secondary School, Raichur city, and the Vidyananda Gurukula Higher Secondary School, Kuknur. A brief account of each of these institutions is given hereunder.

Hamdard Higher Secondary School

The Hamdard High School was started by the late Pandit Taranath, who was an eminent nationalist, in 1920 on nationalist lines as a sort of revolt against the oppressive feudal rule. It had a strength of about 150 pupils at the time of its inception. The name of Pandit Taranath as a poineer in the educational advancement will be long remembered in the area. The Hamdard High School stands as a monument to his long years of social service. The school was inaugurated with primary I to IV standards, together with the I, II and III forms of the middle stage. By 1925, it was converted into a full-fledged high school. Since then, it has been expanding and has become a household word in the area. With the expansion of the high school, the primary sections were abolished and only the middle (*i.e.*, senior primary) and high school classes were retained. The strength of the school at the time of the re-organisation of States was about 500 and by 1968 it rose to 1,125, under the charge of 39 teachers. It was upgraded into a Higher Secondary School during the year 1966-67, with the opening of XI standard in Humanities. In the same year, English medium sections were also started.

The school is situated in the heart of the town near the Naurang Darwaja of the Raichur Fort. First, it was started in a mud house of a mediaeval type. Now, this is the biggest school in the town with a huge building and with an adequate number of rooms for holding classes. Students from far and near are attracted for studies in this institution. The organisation which runs the institution is called the Taranath Shikshana Samsthe (this Samsthe runs also the Laxmi Venkatesh Desai College), named after the founder of the institution. Besides public contributions, the school also gets a Government grant. The institution has a plan of starting a general hostel for the benefit of needy students. Many of the products of this institution are now rendering valuable service in various fields.

Vidyananda Gurukula Higher Secondary School

Vidyananda Gurukula Higher Secondary School at Kuknur in Yelburga taluk is also a well-known private institution started by the efforts of Sri R. B. Desai and the late Sri H. Ramaswamy, in 1922. Before the establishment of this institution. students from this backward area had to go to Raichur or Dharwar for their studies. The institution was started as a primary school with standards I to IV and the strength of students at the time of inception was 75, managed by five teachers. By 1952, it was

upgraded into a high school and was recognised by the erstwhile Hyderabad Government with an annual grant of Rs. 14,934. Recently, *i.e.*, in the year 1967, it was upgraded into a Higher Secondary School, with the opening of XI standard in Humanities. The present strength of pupils in the school, including the primary sections, is 598, under the charge of 27 teachers.

The school has got 13 acres of land, with a well-constructed building, donated for the use of the institution. The activities of the school are considerably helping the promotion of education of the people in that rural part. The results of the S.S.L.C. examination during the years from 1963 to 1969 have been more than 60 per cent except in 1964 and 1966. Many of those who studied in this institution were active participants in the *satyagraha* movements waged for the establishment of responsible Government in Hyderabad State and its accession to the Indian Union. The institution has produced also a good number of persons who are making considerable contributions in the field of letters and social service.

Growth of literacy through the decades

Raichur district comprised eleven taluks before its integration with the new Mysore State on the 1st November 1956, when Gadwal and Alampur taluks were transferred to Andhra Pradesh. Any study of the trends of literacy in the district prior to re-organisation would, therefore, include these two taluks also unless specifically stated otherwise.

In the past, Raichur district was educationally backward compared to the other areas of the new Mysore State. The percentage of literacy was very low. In 1901, the proportion of persons in the district, who were able to read and write, was 2.1 per cent (males 4 per cent and females 0.15 per cent). The term 'literate' used in the 1951 census figures included all those who were able both to read and write but had not passed any examination or had read upto the third form or eighth class. The number of such literates was 88,561 in 1951. As per the Statistical Outline of Mysore for 1957, the number of literates in the district in that year was 1,10,390, giving a percentage of 9.3 to the total population of the district. Out of this total, there were 97,990 male literates and 12,400 female literates, giving a percentage of 16.9 and 2.2 respectively. These figures indicate that the progress of the district in the educational field was very poor. Education had not made any headway at all in the villages. The Government, of late, had introduced compulsion in the primary stage in several areas of the district.

As per the 1961 census, the number of literates and the educated in the district was 1,72,415, out of whom 1,43,957 were males and 28,458 females. Thus, it is seen that within a decade, the percentage of literates had increased from 9.3 in 1951 to 15.66

in 1961. The cultivating classes in the rural areas have yet to favour the idea of sending their children to schools. Further, especially in the rural areas, pupils drop out at the end of primary stage for assisting their elders in agricultural activities. In recent years, various efforts have been made by running adult literacy classes, organising social activities and introducing incentives to attract the rural adults also to learn to read and write.

Two statements showing literacy by taluks and towns in Raichur district in 1951 and 1961 are appended at the end of this chapter.

Educational levels

The statement given below shows the number of literates and persons possessing various educational qualifications in the district as enumerated in the 1951 census :—

Educational level	*Total*	*Males*	*Females*
1	2	3	4
Literates ..	1,10,390	97,990	12,400
Middle School ..	4,220	3,807	413
Matriculation or S.S.L.C. ..	1,962	1,865	97
Intermediates in Arts and Science.	235	223	12
Graduates in Arts and Science	183	181	2
Post-Graduates in Arts and Science.	15	14	1
Teaching ..	205	174	31
Engineering ..	238	238	..
Agriculture ..	16	16	..
Veterinary ..	2	2	..
Commerce ..	16	16	..
Law ..	180	179	1
Medical ..	122	109	13
Others ..	395	360	35

As per the 1961 census, the following are the figures showing both the number of literates without educational level and the number of literates with certain educational levels :—

Educational level	*Total*	*Males*	*Females*
1	2	3	4
1. Literates without educational level.	1,34,161	1,13,963	20,198
2. Primary or Junior Basic education.	30,806	23,097	7,709
3. Matriculation and above ..	7,448	6,897	551
Total ..	1,72,415	1,43,957	28,458

The following figures indicate the number of persons in the urban areas of the district possessing educational qualifications higher than matriculation as in 1961 :—

Educational level	*Total*	*Males*	*Females*
1	2	3	4
(1) Technical diploma equal to degree.	216	211	5
(2) Non-technical diploma not equal to degree	50	50	..
(3) University or Post-graduate degree other than technical degree.	514	472	42
(4) Technical degree or diploma equal to technical degree :			
(*a*) Engineering ..	116	116	..
(*b*) Medicine ..	25	24	1
(*c*) Agriculture ..	17	17	..
(*d*) Veterinary and Dairying	9	9	..
(*e*) Technology ..	4	4	..
(*f*) Teaching ..	54	46	8
(*g*) Others ..	1	1	..

As per the 1951 Census, there were in all 1,92,854* persons belonging to the Scheduled Castes and 135 belonging to the Scheduled Tribes. In 1961, there were 1,14,079 persons (56,618 males and 57,461 females) belonging to the Scheduled Castes and 45 persons belonging to the Scheduled Tribes (27 males and 18 females) in the district. To further the education of these people, the State Government have been implementing several schemes such as non-levy of fees for their education and award of special scholarships, etc. The Social Welfare Directorate, under the supervision of a special staff, have been implementing special schemes of education for them (*See* Chapter XVII).

Pre-Primary Education

Formerly, infant classes were attached to some primary schools and, to some extent, they served the purpose of pre-primary and nursery education. Now, pre-primary education is mostly managed by private organisations. The general policy of Government in this respect has been one of encouragement and assistance rather

*Including Gadwal and Alampur taluks.

than of direct initiative. The Government are helping the private agencies and local bodies by giving grants-in-aid for running *shishu-viharas* or nursery schools, which are meant primarily for the development of the educational instincts in children of the age group of three to five years. As on 31st March 1969, there were three nursery schools, one recognised and two unrecognised, each with a capacity of 50 pupils, under the charge of 10 teachers, managed by private bodies. Besides these, there were eleven nursery classes, three at the district headquarters and one at each taluk headquarters, with a capacity of 50 pupils in each class, administered by the Social Welfare Department. The lady organisers of the respective places were in charge of the pupils.

Primary Education

Set-up under Hyderabad Government

Primary education was imparted mainly in primary schools and the primary sections of some of the composite primary-*cum*-middle schools. Usually, the primary sections consisted of five classes, the infant class, corresponding to the nursery class, and primary classes I to IV. In 1903, there were 31 primary and two middle schools in the district and the total number of pupils under instruction was 2,679, including 94 girls.

The primary education was the sole responsibility of the Government, as in the former Mysore State. The duration of primary education was of seven years and it was provided in two kinds of schools, namely, primary schools with classes I to IV and primary-*cum*-middle schools which had classes V to VII in addition. Besides these schools, there were middle schools corresponding to the old middle schools in ex-Mysore State, with only three classes, V, VI and VII.

There was a public examination at the end of the seventh year of primary education, the passing of which enabled the students to enter the high school. The entire school course was of ten years' duration, one year less than in other areas where it was of eleven years. But whenever the infant classes were attached, the duration was eleven years, but the infant class was not compulsory.

As in April 1957, according to the figures made available by the District Educational Officer, Raichur, there were 734 boys' primary schools and 31 girls' primary schools in the district. The following table gives the number of boys and girls in primary schools, taluk-wise, as in 1957 :—

Taluk		*Boys*	*Girls*	*Total*
1		2	3	4
Raichur	.. ..	4,361	757	5,118
Manvi	.. ..	3,142	327	3,469
Deodurg	.. ..	2,175	234	2,409
Lingsugur	.. ..	2,554	358	2,912
Sindhanur	.. ..	1,636	158	1,794
Kushtagi	.. ..	2,435	289	2,724
Koppal	.. ..	2,931	578	3,509
Yelburga	.. ..	2,933	409	3,342
Gangavati	.. ..	1,543	471	2,014
	Total ..	23,710	3,581	27,291

Voluntary Schools

There were some schools in the district known as Voluntary Aided Primary Schools. These were, in fact, single-teacher primary schools where the teachers, who volunteered to work in them, were paid a grant of Rs. 30 per mensem without any dearness allowance or any service conditions ; they were paid for all the twelve months in a year. As in April 1957, the number of such voluntary schools was 202. All these schools were taken over by the Government during the Third Five-Year Plan. There were only three regular aided primary schools in the district receiving Government help on grant-in-aid basis in 1957.

Progress from 1951-52 to 1965-66

For a total number of 1,364 villages in the district, there were in all 765 primary schools with a pupil population of 27,291 in 1957. More than 300 primary schools had no proper buildings. During the First Five-Year Plan, 63 voluntary schools were taken over by Government and 25 ordinary schools were converted into basic schools. During the Second Five-Year Plan, 388 single-teacher schools were opened in school-less villages and 40 additional teachers were appointed to full-fledged primary schools ; 20 primary schools were converted into basic schools. During the Third Five-Year Plan, about 340 new schools were opened, 471 additional teachers were appointed and 202 voluntary schools were taken over by Government.

Junior Primary Schools

With the object of obtaining uniformity of pattern all over the State, primary schools of all types have been now categorised into junior primary schools with I to IV standards and senior primary schools with either I to VII standards or V to VII standards. Within a period of 12 years since 1957, the number of junior primary schools in the district had gone up from 765 to 1,005 and the pupil strength from 27,291 to 42,225. The following table gives the taluk-wise number of junior primary schools with pupils and teachers as in 1968-69 :—

Number of Junior Primary Schools (with pupil and teacher strength) in Raichur district as in 1968-69

Sl. No.	Name of taluk	No. of schools	Boys	Girls	Total No. of pupils	Men teachers Trained	Men teachers Untrained	Women teachers Trained	Women teachers Untrained	Total No. of teachers
1	2	3	4	5	6	7	8	9	10	11
1.	Raichur ..	129	3,872	1,856	5,728	64	6	73	8	151
2.	Deodurg ..	128	3,121	1,126	4,247	112	..	35	5	152
3.	Manvi ..	114	849	792	1,641	71	6	51	9	137
4.	Koppal ..	108	4,060	2,104	6,164	96	..	39	1	136
5.	Gangavati ..	106	2,728	1,822	4,550	78	2	36	1	117
6.	Yelburga ..	81	2,665	1,332	3,997	61	..	26	2	89
7.	Kushtagi ..	114	3,622	1,879	5,501	91	..	40	5	136
8.	Sindhanur ..	92	3,071	1,451	4,522	68	4	36	4	112
9.	Lingsugur ..	133	3,901	1,974	5,875	91	5	43	13	152
	Total ..	1,005	27,889	14,336	42,225	732	23	379	48	1,182

Junior Girls' Primary Schools

Out of 1,005 junior primary schools, 20 were junior girls' primary schools with a total pupil strength of 1,866 girls and 308 boys under the charge of 53 teachers.

Senior Primary Schools

In the year 1957-58, there were eight middle schools, of which four were middle-*cum*-high schools and, as stated earlier, some of the Government schools were also conducting middle school classes which were styled as primary-*cum*-middle schools. In all the eight middle schools, including one for girls, there was a total strength of 2,340 pupils. The State Government was maintaining middle schools at Hanamsagar and Tawargera in Kushtagi taluk and at Kuknur in Yelburga taluk. The Government middle-*cum*-high schools were located one each at Deodurg, Sindhanur, Manvi and Kushtagi. One hundred and thirty-one teachers were in charge of 2,085 pupils in seven boys' middle schools and 10 teachers were in charge of 255 pupils in the girls' middle school at Koppal.

Since 1957, the number of senior primary schools had gone up to 329 by 1968-69, and the strength of pupils had increased to 67,313. The following table gives the taluk-wise number of senior primary schools with pupils and teachers as in 1968-69 :—

Number of Senior Primary Schools (with pupil and teacher strength) in Raichur district as in 1968-69

Sl. No.	Name of taluk		No. of schools	Boys	Girls	Total No. of pupils	Men teachers		Women teachers		Total No. of teachers
							Trained	Untrained	Trained	Untrained	
1	2		3	4	5	6	7	8	9	10	11
1.	Raichur	..	39	7,546	3,054	10,600	148	23	70	35	276
2.	Deodurg	..	26	3,090	1,269	4,359	80	4	23	9	116
3.	Manvi	..	31	4,709	1,073	5,782	104	12	45	8	169
4.	Koppal	..	30	5,375	3,363	8,738	143	6	33	18	200
5.	Gangavati	..	45	5,398	2,414	7,812	129	5	47	9	190
6.	Yelburga	..	46	6,712	2,994	9,706	178	..	64	1	243
7.	Kushtagi	..	39	3,818	2,178	5,996	135	6	39	5	185
8	Sindhanur	..	30	3,629	1,419	5,048	78	6	35	6	125
9.	Lingsugur	..	43	6,043	2,199	8,242	129	12	61	11	213
	Total	..	329	46,320	19,963	66,283	1,124	74	417	102	1,717

Out of 329 senior primary schools, eight were girls' schools with a pupil strength of 2,485 girls and 55 boys under the charge of 63 teachers. These schools were situated at Raichur, Manvi, Deodurg, Sindhanur, Koppal and Gangavati.

During 1968-69, the progress of primary education was still furthered by starting 66 new schools and appointing 86 teachers, by which the total number of primary schools went up to 1,400 and the total strength of pupils to 1,12,826.

Compulsory Primary Education

Compulsory primary education was introduced in selected areas from the academic year 1953, in accordance with the Hyderabad Compulsory Education Act, 1952. In each district, a contiguous area was brought under compulsion. There was, however, no Attendance Officer. The District Educational Officer was in charge of the enforcement of this Act as well. In 1954, Compulsory primary education was introduced in 64 schools in Raichur district. In 1956, the Act was extended to 20 more schools. In the year 1956-57, the strength of pupils in these schools was 4,680.

Mysore Compulsory Primary Education Act, 1961

One of the most important programmes included in the Third Five-Year Plan was for expansion and improvement of primary education aimed at making it universal, free and compulsory. The Union Government decided that a beginning should be made from the year 1961-62 and at least 90 per cent of the children of the age group 6-11 should be brought into the schools by the end of 1965-66. The Mysore State took up this task in right earnest, and necessary steps were taken to implement the compulsory education scheme in stages, starting with the children of the age group 6-7 during 1961-62 and extending it to the next age groups in succeeding years, so that by the end of the Third Five-Year Plan, the whole of the age group 6-11 could be covered. For this purpose, the Mysore Compulsory Primary Education Act, 1961, was passed by the State Legislature in April 1961, and its provisions were brought into force with effect from the 1st August 1961 throughout the State. The main provisions of the Act are the following :—

(i) establishment of primary schools within a walking distance of one mile from the home of every child in the State ;

(ii) making it the responsibility of every parent to cause his children to attend an approved school ;

(iii) the creation of attendance authorities to enforce enrolment ;

(iv) prevention of employment of children which would keep them away from attendance at schools ; and

(v) constitution of primary school panchayat courts to try offences contravening the provisions of the Act.

Rules were also framed for the effective implementation of the Act. On the model of the National Seminar on compulsory primary education held in Delhi with representatives from all the States attending it, a State-Level Seminar was also held in the State in April 1961. The most important recommendations of the Seminar, which have been accepted by Government, are the following :—

(i) opening of schools in all villages having a minimum population of 300 where the minimum number of students are available ;

(ii) provision of additional teachers to existing schools ;

(iii) provision for incentive schemes like mid-day meals, supply of books, attendance scholarships, etc ;

(iv) constitution of a School Betterment Committee for each school ; and

(v) making the Taluk Development Boards and the Municipalities share the responsibilities connected with the implementation of compulsory primary education in their respective areas.

An enumeration of children of school-going age was conducted early in February 1961, in the entire State, to assess the number of children who should be enrolled. The number of such children enumerated in Raichur district was 24,691 boys and 18,382 girls. The number of children who were admitted into schools as per the scheme was 21,913 boys and 13,743 girls, the total percentage of enrolment being 83.

The following statement shows the number of children enumerated and enrolled and the percentage of enrolment, during the subsequent years upto the end of 1968-69 :—

Number of children enumerated and enrolled in Raichur district from 1962-63 to 1968-69

Particulars	1962–63			1963–64			1964–65			1965–66		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
1	2	3	4	5	6	7	8	9	10	11	12	13
Enumerated ..	53,357	39,962	93,319	64,162	47,681	1,11,843	69,161	47,479	1,16,640	72,125	46,052	1,18,177
Enrolled ..	42,035	28,107	32,312	54,762	34,868	89,630	57,563	34,166	91,749	65,047	37,329	1,02,376
Percentage of enrolment.	82	71	77	85	73.7	82	83	72	78	90	81	86

Particulars	1966–67			1967–68			1968–69		
	Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
1	14	15	16	17	18	19	20	21	22
Enumerated ..	83,700	52,402	1,36,102	74,819	43,817	1,18,166	1,04,940	60,636	1,65,576
Enrolled ..	60,716	40,431	1,10,147	67,221	36,840	1,04,061	78,580	42,657	1,21,237
Percentage of enrolment.	83	79	81	89.8	84	86.9	75	70.3	72.5

As seen from the foregoing figures, the achievement by the end of 1965-66 was short of only 4 per cent for the expected 90 per cent. But on the whole, regarding the total assessment and enrolment, there was a marked increase of more than three times within a period of eight years.

Basic Education

The scheme of basic education, which was sponsored by Mahatma Gandhi, gained importance after independence. The principle underlying the scheme is that children should learn also some suitable crafts so as to develop initiative, enterprise and resourcefulness. Productive work being made a basis of learning, the children are taught basic crafts like spinning, weaving, gardening and agriculture. The teaching staff for these schools are drawn from the basic training institutions. Basic education, with a vocational bias, has been accepted as a pattern of education.

As on 31st March 1969, there were 86 junior basic schools and two senior basic schools in the district. Junior basic schools are schools with standards I to IV and senior basic schools have classes from V to VII. The following statement indicates the number of basic schools, the strength of pupils and teachers :—

Type of institution	*No. of schools*	*No. of pupils*	*No. of teachers*
Junior Basic ..	84	8,458	252
Senior Basic ..	2	236	24
Total ..	86	8,694	276

Medium of Instruction

The medium of instruction in the primary schools is generally the mother-tongue or regional language of the child. In a few of the schools, the pupils are taught in Hindi and Telugu also depending upon the number of such pupils in the schools concerned. One Junior Tamil School was started at the Hutti Gold Mines in 1958-59 and one Telugu School was started at Ramanagar camp in Manvi taluk in 1968-69. The strength of students of the Tamil School was 185 boys and 128 girls, under the charge of three men teachers and one woman teacher. In the Telugu School, there was only one class with 40 pupils under the charge of one teacher.

Urdu Classes

Parallel Urdu classes are run in many of the existing primary schools in Raichur district. In 1968-69. there were 4.235 boys and 2,340 girls attending these Urdu classes under the charge of 100 men and 60 women teachers.

Changes in syllabi of studies

Soon after the reorganisation of States, the State Government appointed a committee called the Educational Integration Advisory Committee to advise them regarding the steps to be taken to evolve a common pattern of education for the new Mysore State. This committee proposed a seven-year primary (basic) education and a four-year higher secondary education to be uniformly followed in the new State.

A curriculum committee was then appointed to formulate the outlines of the primary school course and various syllabus sub-committees were also constituted to draw up detailed syllabi for the subjects and activities in the primary schools. The draft syllabi prepared by the above sub-committees were published with a view to eliciting opinions, criticisms and suggestions from educationists and others interested in education. An *ad-hoc* committee was then appointed to go through the opinions, views and suggestions and to finalise the draft syllabi. The syllabi thus finalised by the *ad-hoc* committee were accepted by the Educational Integration Advisory Committee and approved by Government.

The revised syllabi of standards I and II were introduced in all the primary schools of the State from the academic year 1959-60, that of standards III and IV from the year 1960-61 and that of standards V and VI from 1961-62. The revised syllabus of standard VII was introduced throughout the State from the school year 1962-63.

Mid-day meals

The purpose of providing mid-day meals in the primary schools to poor children is to promote their school attendance and thus make the universal, free and compulsory primary education a success all over the State. The mid-day meals scheme was started in October 1963 and since then, the Department of Public Instruction, in collaboration with the CARE organisation has been supplying mid-day meals to primary school children during the intervals. The quantity of food supplied to each school-going pupil is CSM (corn meals) 3 ounces and oil half an ounce. To prepare food for one pupil, the total expenditure for one year would amount to about Rs. 50. During the years 1965-66 and 1966-67, the percentages of children covered under the mid-day meals scheme in Raichur district were 53.5 and 52.5 respectively. In January 1969, the regular number of beneficiaries allotted was 33,700 and the number utilised was 28,241. Pre-school children were also covered under this scheme, the number benefited being 12,616 in January 1969. The interested agencies, such as the Taluk Development Boards, Municipalities, Village Panchayats, etc., are playing an important role in feeding as many school-going children as possible under the mid-day meals scheme.

The CARE (Co-operation for American Relief Everywhere), which is engaged in this scheme, is an American voluntary organisation doing relief and welfare work in many countries. It is a non-political organisation devoted to serve on a non-profit basis, and its activities are being carried on in 14 States of our country.

Public contributions towards education

The public of Raichur district are not lagging behind in discharging their responsibilities in the field of education. They have been contributing liberally towards the various educational schemes being implemented in the district. The following figures indicate the amounts directly contributed by the public of Raichur district since 1961-62 :—

Sl. No.	*Year*			*Contribution*
				Rs. P.
1.	1961–62	..	..	62,499—71
2.	1962–63	..	..	1,65,525—68
3.	1963–64	..	..	95,153—23
4.	1964–65	..	..	96,529—33
5.	1965–66	..	..	1,22,236—31
6.	1966–67	..	..	2,89,671—94
7.	1967–68	..	..	1,15,945—50
8.	1968–69	..	..	10,77,426—10 (upto end of 2nd quarter).

Administration of education

The administrative pattern of education in the erstwhile Hyderabad-Karnatak areas was different, to a certain extent, from that obtaining in the former Mysore State. At the district level, an Inspector of Schools was in charge of primary schools in Raichur district. He was a gazetted officer, holding a class II post. The administration of all primary schools was his responsibility. The inspection of these schools was, however, done by the Deputy Inspectors of Schools in charge of each educational range, who were non-gazetted officers. All administrative matters like transfers and promotions vested with the Inspector of Schools. The Deputy Inspectors were subordinate to the Inspector of Schools.

Present set-up

The designation of Inspector of Schools has since been changed to District Educational Officer to achieve uniformity in this regard. The District Educational Officer is responsible for the administration and control of all primary, basic, middle and high schools. He is also responsible for the release of grants to aided high schools, orphanages and aided hostels in the district. To assist him in

matters of primary education, there are three Assistant Educational Officers, their headquarters being at Raichur, Lingsugur and Koppal. To assist him in matters of secondary education, there is one more Assistant Educational Officer. A Deputy Director of Public Instruction stationed at Gulbarga is in charge of the administration and control of all secondary schools and teachers' training institutions in the district.

There are nine Range Offices, one at each taluk headquarters, and each range is under the control of an Inspector of Schools assisted by one Deputy Inspector of Schools in respect of compulsory primary education and inspection of schools. Each Assistant Educational Officer of primary education is in charge of three ranges; Raichur area includes Raichur, Manvi and Deodurg Ranges while the Lingsugur area includes Lingsugur, Sindhanur and Kushtagi Ranges and the Koppal area Koppal, Gangavati and Yelburga Ranges.

In addition to the above mentioned executive staff, there is also a Gazetted Assistant under the District Educational Officer to supervise the ministerial and accounts work.

A District Book Depot, with a I Division Clerk, is attached to the District Educational Officer.

SECONDARY EDUCATION

Set-up under Hyderabad Government

A Board of Secondary Education was in existence to guide and supervise secondary education in the old Hyderabad State, prior to reorganisation. The Board made periodic recommendations to the Government for the organisation of secondary education. Various committees and sub-committees were formed to evolve a suitable pattern of secondary education. Text Book Committees were also constituted to prepare syllabi and also to select suitable books of studies for the different classes of the secondary stage. The system of secondary education was reorganised in such a way as to facilitate bifurcation at the end of any stage of instruction, *i.e.*, primary, lower secondary, higher secondary or university stage. Under the revised scheme, secondary education extended over a period of six years from class V to class X.

Medium of Instruction

In the ex-Hyderabad State, the use of the mother-tongue, namely Urdu, Kannada, Marathi or Telugu as the medium of instruction was permitted in all the girls' higher secondary schools upto the end of the lower secondary stage. But in the boys' higher secondary schools, Urdu was the only medium of instruction in the lower as well as the higher secondary stages.

Immediately after the formation of the new Mysore State, the Government took steps to integrate the different patterns of education obtaining in the various integrated areas. For this purpose, the Mysore Educational Integration Advisory Committee was constituted in December 1956 to evolve a common pattern of education for the entire State as already stated earlier. One of the main recommendations of this committee was that the primary and secondary stages of education should be reorganised so as to provide for a seven-year course of primary education and a four-year course of higher secondary education in lieu of the different educational patterns obtaining in the various areas. Accepting this recommendation, the Government passed orders directing that the pre-college education throughout the State should consist of an eleven years' course—seven years of primary and four years of secondary education—and that four years of secondary education should be organised in a single institution to be known as the higher secondary school or multi-purpose high school. The new scheme was ordered to be given effect to from the year 1960-61.

According to the revised syllabi, the scheme of studies for the higher secondary education was :—

Group 'A' (General)

(1) Languages—Kannada, Telugu, Urdu, Persian, Arabic, Sanskrit, Hindi, Tamil, Marathi, Prakrit and Pali. (2) English, (3) Hindi, (4) Social Studies, (5) General Science, (6) General Mathematics, (7) Crafts, and (8) Physical Education.

Group 'B' (Vocational and other subjects from IX *standard onwards)*

(1) Humanities, (2) Science, (3) Technical, (4) Agriculture, (5) Commerce, (6) Home Science, (7) Fine Arts, and (8) Fisheries Technology.

These syallabi have been further revised abolishing the electives from the year 1969-70.

New scheme of studies

As per the recommendations of the Kothari Commission, the State Advisory Board of Education resolved to provide a common curriculum of general education for the first 10 years of school education. Accordingly, a general curriculum committee and several sub-committees were formed to frame the syllabi in various subjects for standards VIII, IX and X. It was the intention of the Government to abolish the electives in standard IX during the academic year 1969-70. The new syllabi, after the approval of the State Secondary Education Board, was approved by the

Government in November 1968, with permission to implement it from 1969-70 in standard IX and from 1970-71 in standards VIII and X.

The new scheme of studies is as follows :—

1. First Language

(*a*) One of the following languages: Kannada, Telugu, Tamil, Hindi, Urdu, Marathi, English, Sanskrit, Persian and Arabic.

or

(*b*) One of the following composite courses.—

(i) Mother-tongue+Regional Language (Except Kannada).

(ii) Mother-tongue+Classical Langauage

(iii) Regional Language+Classical Language (No composite course in the case of English).

2. Second Language — English

3. Third Language — Hindi

4. Science — Physics, Chemistry and Biology

5. Mathematics — Arithmetic, Algebra and Geometry

6. History, Geography and Civics

7. Physical Education

8. Games

9. Work Experience/Drawing and Art/Music and Dance

10. Moral Education/School Broadcasting, and

11. Library Work.

High Schools

In 1953-54, there were only nine high schools—with 4,059 pupils under the charge of 165 teachers—in the district. This number had increased to twelve in 1957. Of these, seven were Government High Schools for boys and one was Government High School for girls and the remaining four were privately owned. During a period of over a decade, *i.e.*, by March 1969, the number of high schools in the district had gone up to 51.

As in July 1969, there were 59 high schools, 54 for boys and five for girls. Of these, eight were newly sanctioned during the early part of 1969–70, seven of these being for boys and one for girls. Of the 54 high schools for boys, 16 were Government schools and they were located at Raichur, Gunjahalli, Deodurg, Lingsugur, Maski, Sajjalagudda, Kushtagi, Hanamsagar, Yelburga,

Koppal, Gangavati, Kanakgiri, Sindhanur, Manvi and Sirvar. The institutions at Deodurg, Lingsugur, Gangavati, Sindhanur and Manvi were higher secondary schools. Of the five girls' high schools, two were Government schools and they were situated at Raichur and Koppal.

Taluk Board High Schools

After the reorganisation of States, the Taluk Boards came forward to start high schools and by the end of 1968-69, there were 18 Taluk Board High Schools in the district and four more schools had been sanctioned to be started during the year 1969-70, thus raising the total number of Taluk Board High Schools to 22. These were located at the places mentioned below :—

Sl. No.	*Place*	*Taluk*	*Sl. No.*	*Place*	*Taluk*
1	2	3	1	2	3
1.	Matmari	Raichur	14.	Hiresindogi	Koppal
2.	Jegarkal		15.	Betageri	
			16.	Kinhal	
3.	Jalhalli	Deodurg	17.	Herur	Gangavati
4.	Gabbur		18.	Karatgi	
5.	Arkera				
6.	Gurgunta	Lingsugur	19.	Jawalgera	Sindhanur
7.	Mudgal				
8.	Hutti				
9.	Chalgera	Kushtagi	20.	Kurdi	Manvi
10.	Hanamanhal		21.	Kavital	
			22	Kallur	
11.	Mangalur	Yelburga			
12.	Tadkal				
13.	Hirewankal-kunta.				

There were no Municipal High Schools in the district as in the old Mysore region. Only one Municipal High School for girls was sanctioned to be started at Sindhanur during 1969-70.

Aided High Schools

Several public associations are running high schools in the district, for which they receive Government grants as laid down in the Mysore Educational Grant-in-aid Code. Cent per cent teaching grant is being given by Government to aided schools since 1967. In addition, building and equipment grants are also given in

deserving cases. These institutions are inspected by the Education Department and their accounts are subject to audit. At the end of 1968-69, there were 15 aided high schools — six at Raichur proper, two at Kuknur and the remaining at Koppal, Tawargera, Hittanhal , Hulgi, Munirabad, Gangavati and Balganur. Of these, two were girls' high schools. During 1969-70, three new schools were started at Raichur, Alawandi and Gejjalagatta and, as a result, the number of aided schools increased to 18. Of these, the Hamdard School at Raichur and the Vidyananda Gurukula at Kuknur were higher secondary schools with XI standard as stated earlier.

The table given below shows the strength of pupils and teachers in the various high schools for boys in the district during 1968-69 :—

Management	*No. of schools*	*Number of pupils*		*No. of trained teachers*		*No. of untrained teachers*	
		Boys	*Girls*	*Men*	*Women*	*Men*	*Women*
1	2	3	4	5	6	7	8
Government ..	16	6,062	486	235	..	65	1
Taluk Board ..	18	1,738	119	31	..	78	..
Aided ..	13	4,095	565	74	2	78	4
Total ..	47	11,895	1,170	340	2	221	5

Girls' High Schools

There were only four girls' high schools as on 31st March 1969. Of these, two were Government institutions—at Raichur and Koppal—and the other two were aided institutions at Raichur itself. A Municipal High School for girls was newly sanctioned to be started at Sindhanur from 1969-70. In places where there are no separate high schools for girls, they are admitted to the boys' institutions where separate seating arrangements are made for them. Owing to the encouragement given to girls' education in the form of freeships and scholarships, the strength of girls in high schools has been on the increase during the past five years. The following table shows the strength of pupils and teachers in the girls' institutions in the district as on 31st March 1969 :—

Management	*No. of schools*	*No. of pupils*		*No. of trained teachers*		*No. of untrained teachers*	
		Boys	*Girls*	*Men*	*Women*	*Men*	*Women*
1	2	3	4	5	6	7	8
Government ..	2	..	798	5	26	1	10
Aided ..	2	435*	642	..	11	1	4
Total ..	4	435	1,440	5	37	2	14

It is seen from the foregoing two tables that only 2,610 girls were in high schools in the district on 31st March 1969. Compared to the total female population of the district, the number of girls studying in high schools may be said to be far from satisfactory.

S.S.L.C. Examination results

At the end of tenth year, a public examination called the Secondary School Leaving Certificate examination is conducted by the State Secondary Education Examination Board. The table given below shows, management-wise, the number of examinees and the number of passes during the years 1967, 1968 and 1969 :—

Year	*No. of examinees*	*No. passed*	*Percentage*
1	2	3	4
	(i) Government High Schools		
1967 ..	1,129	300	26.5
1968 ..	1,248	548	43.8
1969 ..	1,353	570	42.1
	(ii) Taluk Board High Schools		
1967 ..	84	13	15.5
1968 ..	326	111	34.0
1969 ..	416	218	52.4
	(iii) Private or Aided High Schools		
1967 ..	493	216	43.8
1968 ..	655	375	55.6
1969 ..	726	416	57.3

* Only one girls' high school, *i.e.*, St. Mary's Convent High School, Raichur, admits boys and runs separate classes for them.

From all these three types of institutions, the total number of pupils who appeared for the S.S.L.C. examination, the total number of students who passed and the total percentages of passes during the years 1967, 1968 and 1969, were as given below :—

Year		*No. appeared*	*No. passed*	*Percentage*
1		2	3	4
1967	..	1,706	529	28.6
1968	..	2,229	1,034	44.5
1969	..	2,495	1,204	48.2

As seen from the above figures, there was much improvement in the results in 1968 and 1969 over that of 1967.

In 1962, there were 30 high schools in the district giving a ratio of 1 to 36,400 population and the area served by a high school was, on an average, 181.20 sq. miles. In 1969, there were 59 high schools giving a ratio of 1 to 18,659 population and each high school serving an area of 92.13 sq. miles, thus registering nearly a hundred per cent increase in seven years.

Educational and Vocational Guidance

In recent years, educational and vocational guidance activities are gaining momentum in secondary schools. The State Bureau of Educational and Vocational Guidance, a wing of the Department of Education, has been organising guidance activities since its inception in 1959. One of its important activities is to train high school teachers as career masters, who, in turn, can guide the pupils in solving their problems—educational, vocational and personal. The career masters also enable the pupils to know the 'world of work' so that they can choose proper vocations after leaving the schools. Upto the end of 1968-69, 23 high school teachers in Raichur district were trained as career masters. The target under the Fourth Five-Year Plan is to provide at least one career master to each of the high schools in the State. The guidance activities also aim at minimising the failures in the examinations by improving the study habits of the pupils. There is also an attempt to co-ordinate the services of several agencies interested in education.

Commerce Education

Commerce education is imparted in three types of institutions, namely, high schools, colleges and private commerce schools.

There has been a Commerce Arts group in the S.S.L.C., which will be discontinued after 1969-70 in view of the new scheme of providing electiveless education from 1969-70 by giving effect to the new syllabus in the IX standard. The commerce group includes subjects like Accountancy, Banking, Practice of Commerce, Co-operation and Typewriting. A candidate for the S.S.L.C. examination with Commerce Arts as optionals has to choose any two of the above mentioned subjects. Commerce education, at the college level, is imparted as a continuation course for those who had taken these subjects in the high school.

Commerce Institutes

The commerce schools conduct classes generally in the mornings and evenings and prepare candidates for the various commerce examinations conducted by the Government. Many of these institutions receive maintenance grants from the Education Department. The Board for Commerce Education and Examinations, constituted by Government, prescribes the courses for these examinations and conducts them. The Director of Public Instruction is the *ex-officio* President of the Board and a Senior Assistant Director is its *ex-officio* Secretary. The Board grants certificates and diplomas to successful candidates. There were seven such institutions in the district, all under private managements, during the year 1968-69, in which 1,081 boys and 49 girls were studying under the guidance of 11 teachers. The following table shows the names of the institutions and the number of students and teachers in them as on 31st August 1968:

Sl. No.	*Name of Institute*	*Date of establishment*	*Boys*	*Girls*	*Total*	*Teachers*
1	2	3	4	5	6	7
1.	The Royal Institute of Commerce, Raichur.	15-8-1938	294	9	303	1
2.	The Rashtreeya Institute of Commerce, Raichur.	1-6-1957	265	7	272	1
3.	The Ravindranath Institute of Commerce, Raichur.	15-2-1959	296	25	321	2
4.	The Golden Institute of Commerce, Hutti.	3-3-1958	26	3	29	3
5.	Sri Ganapathi Institute of Commerce, Koppal.	1-4-1958	57	..	57	1
6.	Sri Lakshminarayana Institute of Commerce, Gangavati.	6-10-1966	71	..	71	1
7.	Sri Srinivasa Institute of Commerce, Munirabad.	9-9-1968	72	5	77	2
	Total ..	..	1,081	49	1,130	11

Higher Education

There had been no facilities for higher education in Raichur district until the year 1954, when Sri Laxmi Venkatesh Desai College was established in Raichur town. In addition to this college, there are now two other colleges, namely, Commerce College in Raichur town and Sri Gavisiddheshwara College of Arts and Science at Koppal. A brief account of each of these institutions is given in the following paragraphs.

Laxmi Venkatesh Desai College, Raichur

The Laxmi Venkatesh Desai College was founded on the 9th of August 1954 as an Intermediate Arts College, with an initial enrolment of only nine students. At first, it had been affiliated to the Osmania University, Hyderabad. It was affiliated to the Karnatak University, Dharwar, after the reorganisation of States in 1956. This institution is called after the donors, Smt. Laxmi Bai and Sri Venkoba Rao Desai, and is managed by the Taranath Shikshana Samsthe, formerly known as the Raichur Education Society. (This Samsthe runs also the Hamdard Higher Secondary School as already stated elsewhere in this chapter).

In the third year, a new one-year pre-university course, both in Science and Humanities, was started and the strength of pupils rose to 84. In June 1957, the first year of the three-year degree course was started leading to B.A. and B.Sc. degrees as also a special one-year course leading to the professional faculties of Medicine and Engineering.

To start with, the strength of the staff was five and by the end of 1968-69, it had risen to 24. The strength of the students as on 31st March 1969 was 670 including 72 girls. There was also a commerce section upto the year 1964, when a new Commerce College was founded by separating the commerce section from the L.V.D. College in accordance with the requirement of the Karnatak University. The College offers courses in Science and Humanities, with Physics, Chemistry and Zoology as Majors among Sciences and Political Science, Economics, Kannada and Hindi as Majors among Humanities.

The College was conducted, in the beginning, in the Hamdard Higher Secondary School premises and later, it was shifted to a rented building. Now it has a building of its own, constructed at a cost of about Rs. 5½ lakhs. It also owns a hostel building with accommodation for 25 students. Besides providing a well-equipped library, the College is encouraging students to take active part in also literary, sports and N.C.C. activities. The institution is also bringing out an annual magazine called the *Prabuddha Vani.*

Bankatlal Rajaram Bhooba College of Commerce

The commerce section of the L.V.D. College was separated from it in 1964 and a new Commerce College was founded on 1st July 1964. The College was named after Bankatlal Rajaram Bhooba on account of the services rendered by him to the Taranath Shikshana Samsthe which is running the institution. In the first year, there were only 49 students; in the second year it went up to 110 while in the third-year it further increased to 200. The strength in March 1969 was 400.

Gavisiddheshwara College of Arts and Science

Sri Gavisiddheshwara College of Arts and Science, Koppal, was established in June 1963, under the auspices of the Gavimatha, one of the oldest religious and educational centres of Raichur district. The College started with Pre-University Arts and I year B.A., with 127 and eight students respectively, having only five members on the staff. During the year 1965-66, the strength of the students was 185. Starting of I year B.Sc. Course in 1966-67 was a special feature in the development of the College. The strength of students, as in July 1969, was Pre-University Course Arts 111, Pre-University Course Science 30, I year B.A. 23 and I year B.Sc. 16, with a total of 180. Including the Principal, there were 12 members on the staff of the College. His Holiness Shri Marishantaveera Swamiji of the Gavimatha and several other members have been providing necessary facilities for the development of the College. The Swamiji has donated about 400 acres of land to the College. Construction of a building, at an estimated cost of Rs. 13 lakhs, is in progress. The Gavimatha is feeding deserving students of both the College and the High School being run under the auspices of the *Matha*, besides providing lodging facilities to many of them.

PROFESSIONAL AND TECHNICAL EDUCATION

Before the Government Polytechnic came into existence at Raichur in 1961, there was a Technical Training Centre under the direct supervision of the Department of Technical Education, imparting training in certificate courses, such as (1) mechanical, (2) civil draughtsmanship, (3) carpentry, (4) tailoring and (5) wiremen's course, each of two years' duration.

Government Polytechnic, Raichur

The Government Polytechnic, Raichur, which is under the direct supervision of the Department of Technical Education, offers Diploma courses in Civil, Electrical and Mechanical Engineering, with an intake capacity of 120 (40 in each of the courses). The duration of the course is three years and the minimum qualification for admission is a pass in the X standard.

The institution has its own building constructed at a cost of Rs. 7.45 lakhs. The workshop, laboratories and the library have been well-equipped at a cost of Rs. 61 lakhs. It has also

a hostel building constructed at a cost of Rs. 6.25 lakhs, with accommodation for 180 students. The library contains about 2,000 technical books; the S.A.S. Book Bank, sponsored by the local Rotary Club has 350 books. The strength of the pupils in different courses during the years 1966-67, 1967-68 and 1968-69 is given below:—

1966–67		*I year*	*II year*	*III year*	*Total*
Civil	..	56	17	23	96
Electrical	..	49	24	33	106
Mechanical	..	56	30	36	122
		161	71	92	324

1967–68		*I year*	*II year*	*III year*	*Total*
Civil	..	54	21	15	90
Electrical	..	52	39	21	112
Mechanical	..	58	41	17	116
		164	101	53	318

1968–69		*I year*	*II year*	*III year*	*Total*
Civil	..	(No admissions)	8	13	21
Electrical	..	6	25	23	54
Mechanical	..	18	24	19	61
		24	57	55	136

From the above figures, it could be seen that there was a marked decrease in the strength of the pupils during 1968-69.

It was said to be due to the present unemployment problem facing the students coming out of the polytechincs.

Industrial Training Institute

The Department of Employment and Training started an Industrial Training Institute at Raichur in May 1958. The work of this institution began with the courses meant for training persons for becoming (1) welders, (2) fitters and (3) linemen and wiremen, admitting, in all, 64 trainees, 16 each for the first two courses and thirty-two for the third one. In 1962, one more course, *i.e.*, carpentry, was added and the strength of pupils during that year increased to 128.

Since its inception upto November 1965, about 1,170 trainees were admitted into the Institute and 505 were trained. One-third of the pupils enjoy the benefit of stipends at the rate of Rs. 25 per month per trainee during their training period of two years. The trainees belonging to the Scheduled Castes are paid Rs. 20 per month by the Social Welfare Department in addition to the stipend of Rs. 25.

The staff of the Institute, as in 1969, consisted of one Principal, five Supervisors and 29 Craft Instructors.

The Institute is functioning in its new building built at an estimated cost of rupees five lakhs; the building includes a workshop as well. The premises have an area of 13 acres and seven guntas with considerable scope for expansion. The construction of five twin-quarters for staff, at an estimated cost of Rs. 39,000 each, is in progress. The Institute is well-equipped to impart effective training in each of the trades and the equipment provided so far has costed about rupees six lakhs. The annual expenditure incurred by the Institute during the years from 1966-67 to 1968-69 was Rs. 82,894, Rs. 1,43,075 and Rs. 90,579, respectively (*See* also chapter V).

P.R.M. College of Indian Medicine

The Patel Road Merchants' College of Indian Medicine, Raichur, was established in August 1966 and named so because the Patel Road Merchants' Association donated Rs. 20,000 for the establishment of the College. The College was sponsored by the Academy of Medical Education, Raichur, its founder-president being Dr. Sangameshwar Sardar, a local medical practitioner and social worker. The College has its own building, and a dispensary for the practicals of the students was established in 1968. The College, at first, started offering a Diploma course in Ayurvedic Medicine and introduced the B.S.A.M. course in 1969-70. The medium of instruction is Kannada or Hindi. The College is affiliated to the Karnatak University. The strength of students, as in 1968-69, was 46, including six girls, while the strength of teaching staff, including the Dean, was nine.

There was an Ayurvedic College at Kushtagi, established in July 1958, under the auspices of the Rashtreeya Ayurveda Vidyapeetha. To start with, there were 30 students in the College, receiving education in Shuddha Ayurveda for a four-year Diploma course. This institution was later shifted to Bagalkot in Bijapur district.

Vutkoor Laxmiah College of Pharmacy

The Vutkoor Laxmiah College of Pharmacy, Raichur, was established in July 1967 and was named after the late Vutkoor Laxmiah, who donated Rs. 25,000 for the establishment of the College. This College was also sponsored by the Academy of Medical Education (which started the College of Indian Medicine). During the year 1968-69, there were 47 boys studying in the College and there were 13 members on the teaching staff including the Dean. The College offers a Diploma course in Pharmacy, the medium of instruction being English.

Teachers' Training Institutions

The training courses for teachers provided by the Department of Public Instruction are of two grades, namely, the Teachers' Certificate (Higher Grade) and the Teachers' Certificate (Lower Grade). The former is intended for teachers in senior primary or middle schools (classes V to VII) and is of two years' duration. The minimum general educational qualification for this course is a pass in the S.S.L.C. examination. The Teachers' Certificate Course (Lower Grade) is for teachers in junior primary schools (classes I to IV) and this course also is of two years' duration. Untrained teachers in service who are non-S.S.L.Cs., or who have passed the VII standard examination, are eligible for admission to this course. There is a public examination at the end of each course followed by a practical examination. The minimum age for admission to the lower course is 16 years, while for the higher course it is 17 years as on the 1st June of the year of admission. The course of studies includes principles of education, methods of teaching, psychology, school administration, crafts, music, kitchen-gardening and physical education. As on the 1st March 1969, there were four teachers' training institutions in the Raichur district, three of them being of the basic pattern, namely, Basic Training Institutions at Yermaras, Sindhanur and Koppal, and the remaining one—Government Hindi Shikshak Training College, Raichur. Brief accounts of these institutions are given below.

Basic Training Institute, Yermaras

The Basic Training Institute, Yermaras, is situated about five miles to the north of Raichur town. It provides training for the Teachers' Certificate Course (Higher Grade) of two years. Facilities are provided at the centre for giving training in crafts and community living. In the beginning of 1969-70, there were 128 trainees, 64 in the I year and an equal number in the II year.

The staff consisted of a Superintendent, nine graduate teachers, two craft teachers, one drawing master and one Hindi teacher.

Basic Training Institute, Sindhanur

The Basic Training Institute at Sindhanur was started during the year 1962-63. It provides training for the Teachers' Certificate (Higher Grade) of two years. The normal intake capacity is one hundred students. But, as in July 1969, there were 111 trainees, 58 in the I year including 10 private candidates and 53 in the II year including 13 private candidates. Out of 10 private candidates in the I year, two were stipendiaries, while in the II year, out of 13 candidates five were stipendiaries (each receiving a stipend of Rs. 25 per month). It has a good building with two blocks, one for academic activities and another for hostel purposes. The hostel consists of 25 living rooms and a dining hall. The staff consisted of a Superintendent, four graduate teachers, one Hindi teacher, two craft teachers, one Arts teacher and one physical education instructor. The institution has four acres of land attached to it for purposes of teaching agricultural craft.

Basic Training Institute, Koppal

The Government Basic Training Institute at Koppal which was started on the 1st June 1960, is attached to the Government High School, Koppal, and is under the direct supervision of the Headmaster of the Government High School. Upto 1967, it used to provide one year Teachers' Certificate Course (Higher) only to S.S.L.C. passed private candidates. But from 1968 onwards, the two-year course was started. The intake capacity is 100, fifty for the I year and 50 for the II year, and provision is made upto 50 per cent for the deputed candidates from the institutions. As in July 1969, there were 55 trainees including 15 private candidates in the I year and 49 trainees including 25 private candidates in the II year. The staff consisted of a Superintendent (who is also the Headmaster of the Government High School), five graduate teachers, two craft teachers, one drawing master and three part-time teachers.

Hindi Shikshak Training College, Raichur

The Government Hindi Shikshak Training College, Raichur, sponsored by the Central Government on cent per cent grant basis, was started in 1961. It was providing a one-year training course to Hindi teachers and candidates qualified in Hindi, upto 1968. In July 1968, it was changed into a two-year Kannada Medium Teachers' Hindi Certificate Higher Course with a special method in Hindi. As in July 1969, there were 66 trainees in the college including four women candidates. The deputation of teachers to this institution is only during alternate years, unlike every year in other training centres. In 1969, the staff consisted of a Superintendent, three graduate teachers, four craft teachers, one Hindi teacher, one Kannada pandit, one drawing teacher, one physical education teacher and one part-time music teacher. The

minimum qualifications required for admission into this institution are a pass in S.S.L.C. and Hindi Pravesika of Dakshina Bharath Hindi Prachara Sabha or other equivalent examination. There is a provision to admit 25 private candidates during the alternate year of admissions. Deserving candidates are paid a stipend of Rs. 25 per month for 10 months in a year. Another special feature of the College is that the trainees get a family allowance of Rs. 25 per month.

Physical Education

There is a physical education wing attached to the District Educational Officer, Raichur. A Physical Education Inspector is in charge of this wing and he supervises the physical education activities of primary schools. His duties include, among other things, guiding of the physical education teachers and organising short-term courses for the primary school teachers. The sports activities of the high schools are supervised and guided by an Assistant Superintendent of Physical Education attached to the office of the Deputy Director of Public Instruction, Gulbarga Division, Gulbarga, to which division Raichur belongs.

District Sports Council

There is a District Sports Council which sponsors sports and other activities for the benefit of the youth. It is conducting short-term coaching classes in athletics and volley-ball. The Mysore State Sports Council has deputed two coaches to train young sports enthusiasts in the district. The duration of the course is three months and the capacity for admission is 30 at a time. Each trainee is paid fifty paise daily towards refreshment charges. This special type of programme is taken up only in two districts of the State, *i.e.*, Raichur and Dharwar.

National Cadet Corps

Another important organisation, which has been sponsoring physical education activities in the district, is the 25 Mysore Battalion, National Cadet Corps, Raichur, which was established in 1963. The aims of this organisation are (i) to develop character, comradeship, ideal of service and capacity for leadership in young men and women; (ii) to provide service training to them so as to stimulate interest in the defence of the community; and (iii) to build up reserve of man-power to enable the armed forces to expand rapidly in a national emergency.

The N.C.C. Unit at Raichur started functioning as 74 Mysore Battalion N.C.C., and it was re-designated as 25 Mysore Battalion N.C.C. on 1st August 1964 under a re-organisation programme. Then, the Laxmi Venkatesh Desai College and the Government Polytechnic, Raichur, and the Gavisiddheshwara College, Koppal, were under the command of this unit. It was again reorganised and now the following sub-units of Senior Division N.C.C. are under this unit: (1) Laxmi Venkatesh Desai College, (2)Bankatlal Rajaram Bhooba College of Commerce

and (3) Government Polytechnic, Raichur. Besides, the following Junior Division troops of Raichur district are under this unit: (1) the Government Multi-purpose High School, Raichur; (2) Hamdard Higher Secondary School, Raichur; (3) Government High School, Gangavati; (4) Government High School, Manvi; and (5) Tagore Memorial High School, Raichur. (The N.C.C. unit has also some sub-units in the Gulbarga district and they need not be mentioned here). It holds annual training camps for the Senior and Junior Division boys, which are attended to by a large number of cadets. The strength of officials and cadets of Senior and Junior Divisions during the period from 1964-65 to 1968-69 is given below :—

Year	*Senior Division NCC*		*Junior Division NCC*	
	Officers	*Cadets*	*Officers*	*Cadets*
1964–65 ..	7	733	4	500
1965–66 ..	6	731	4	500
1966–67 ..	7	874	7	700
1967–68 ..	7	776	7	686
1968–69 ..	6	612	7	694

The organisation holds certificate examinations at the end of every academic year. The number of successful candidates (certificate-wise) during the years from 1964-65 to 1968-69 were as follows :—

Certificate Examinations	*Number of candidates passed*				
	1964-65	1965-66	1966-67	1967-68	1968-69
1. 'A' Certificate.—					
Part I ..	48	85	108	129	188
Part II ..	7	15	21	31	52
2. 'B' Certificate ..	81	51	74	75	54
3. 'C' Certificate ..	7	8	7	5	4

The N.C.C. unit at Raichur has been producing young men with high standards in drill, rifle firing and discipline.

Social Education

Raichur district is a rapidly developing district owing to the irrigation projects undertaken for using the waters of the Tungabhadra and the Krishna. In this context of development, the importance of social education is now being felt more and more. About a decade back, there were seven adult education schools in the district with a teaching strength of 10. They were situated at Ganigarpet (Raichur), Lingsugur, Kushtagi, Deodurg, Jantakulkalam, Gangavati and Boorurwadi.

Functional Literacy Project

A Functional Literacy Programme was started in Raichur district in 1968 with the following objectives : (1) to link literacy with agricultural production so as to improve the occupational efficiency of the adult learner ; (2) to impart information on improved farm practices by using the primer containing the vocabulary of agriculture with particular reference to the high-yielding varieties programme ; and (3) to co-ordinate the contents of lessons and the topics of discussion in the literacy classes with those of the Farmers' Training Programme of the Ministry of Food and Agriculture and the special broadcasts by the All India Radio.

Under the supervision of the District Educational Officer, Raichur, 60 literacy centres were started in four irrigated taluks—30 in Gangavati, 10 in Sindhanur, 10 in Manvi and 10 in Raichur taluk. A six months' course was conducted from 1st June 1968 to 30th November 1968, admitting 30 illiterate farmers including two ladies at each centre.

The staff employed for this new type of work, which was the first of its kind in the Mysore State, were six supervisors trained at Delhi and 60 teachers trained by these supervisors at the Gramasevaks' Training Centre, Gangavati, with the co-operation of the Principal and the Chief Instructor of the farmers' training programme at the Gramasevaks' Training Centre. Each supervisor was in charge of 10 centres of functional literacy classes and was paid a remuneration of Rs. 50 per month and each literacy instructor was paid Rs. 30 per month. The farmers were supplied with slates and pencils and the centres with kerosene oil and petromax lights. It was reported by the District Educational Officer, Raichur, that all the 1,800 farmers who were admitted to the course evinced keen interest in the programme since it was closely connected with their daily occupation, *i.e.*, agriculture. The amount spent on this programme during the year was Rs. 30,108-92. Training for the second batch of farmers was scheduled to start from 1st June 1969.

Public Libraries

As per the provisions of the Mysore Public Libraries Act, 1965, a State Library Authority was constituted in October 1966 with the Minister for Education as the President and with 22 members drawn from different fields ; the State Librarian is its *ex-officio* Secretary. A separate Department of Public Libraries was set up at the State level with effect from the 1st November 1966 with the State Librarian as its head. As required under the provisions of Sections 3 and 16 of the Mysore Public Libraries Act, 1965, a panel of names for the constitution of Local Library Authorities in Raichur district has to be sent to the Government by the Deputy Commissioner of the district. During the Fourth Five-Year Plan (from 1969-70 to 1973-74), it is proposed

to start a Central Library at the district headquarters, 19 Branch Libraries and about 240 Delivery Stations all over the district. Besides the school and college libraries in the district, there were four public libraries as on 31st March 1969—two at Raichur and one each at Hanamsagar and Adur.

City Municipal Library, Raichur

The City Municipal Library at Raichur, which is situated in the heart of the city, has been very useful to the public. It is being managed by a committee consisting of 11 members. As in July 1969, there were 4,049 books (English 1,277, Kannada 2,095, Hindi 425 and Urdu 252) in the library. During the years 1967-68 and 1968-69, books worth nearly Rs. 20,000 were added to the library. The daily average number of persons who made use of this library during 1968-69 was 200. It was also getting 15 daily newspapers in English, Kannada, Hindi, Urdu and Telugu languages, 10 weeklies in English, Kannada and Hindi and 30 monthly magazines in English, Kannada, Hindi, Urdu and Telugu.

In the Karnataka Sangha Library at Raichur, there were 3,421 books in 1969. It received six dailies, eight weeklies, three fortnightly and 16 monthly magazines.

In the Sri Shakti Vachanalaya, Hanamsagar, there were 1,555 books in 1969. It received two daily papers, three weeklies, three fortnightly magazines, seven monthly magazines and three annual magazines.

One more public library called Vishwanatha Vachanalaya was started on 1st April 1968 at Adur in Yelburga taluk.

LITERARY AND CULTURAL ACTIVITIES

The area constituting the present Raichur district has rich cultural traditions and has been playing an important role in the field of literary activities since early times. The temples and *mathas* were centres of cultural, literary and social activities. A galaxy of eminent personalities, who shone in the cultural field, hailed from this district. Rulers of powerful kingdoms like those of the Chalukyas and Rashtrakutas, of Vijayanagara and of the Bahmanis and Adil Shahs, which arose in the vicinity of the district, were great patrons of arts and letters. There were independent *Bhakti* movements pioneered by *Sharanas* and *Haridasas* who were dedicated souls and many of whom have left a deep impress on the literature and culture of the Kannada country.

In the 11th century, nearly a 100 years before the time of Sri Basaveshvara, Naoli, in Lingsugur taluk, was known for two reputed *vachanakaras*, namely, Shankara Dasimayya and Dhak-

keya Marayya. They were the beginners of the *vachana* style which produced, in the following centuries, a unique treasure of Kannada literature. In the 12th century, Ayadakki Marayya of Amareshwara in Lingsugur taluk, his wife Ayadakki Lakkamma, and Bibbi Bacharasa of Gabbur made a notable mark as *vachanakaras*. In the 16th century, Lingannacharya of Kallur wrote *Vararamya-Ratnakara* in Bhamini-shatpadi metre.

During the times of the Vijayanagara kings, the *mathas* were re-organised, and during the reigns especially of Proudha Devaraya and Krishnadeva Raya, cultivation of arts and letters received a great impetus. The great Haridasa tradition was propagated in Raichur district by several eminent saints like Vijayadasa, Gopaladasa and Jagannathadasa in the 17th and 18th centuries.

Vijayadasa was born in 1687 A.D. at Chikalparvi in Manvi taluk in very humble circumstances. At an early age, he went to Varanasi for education. It is said that Purandaradasa favoured him with another name, Vijaya Vitthala. Later on, he was known as Vijayadasa. He is said to have composed 25,000 songs, the largest number of Kannada songs, ranking second after Purandaradasa in that respect. Gopaladasa, born in 1717 A.D. at Masarkal of Deodurg taluk, was a disciple of Vijayadasa. Gopaladasa is well known for his songs which are full of devotion. There is hardly a topic which he has not dealt with concerning mysticism. Jagannathadasa was born in 1727 A.D. in a family of Kulkarnis (village accountants) at Biagwat, a village in Manvi taluk. He was called Jagannatha Vitthala by Gopaladasa. He was an eminent scholar of Sanskrit and a proficient writer in Kannada. He composed a number of devotional songs and wrote a learned treatise called *Harikathamritasara*. He was admired by Purnaiya, the great Dewan of Mysore.

Manohar Vitthala of Buddinni in Manvi taluk, earlier called as Buddinni Desai Narayanappa, was a disciple of Sri Gopaladasa. He lived about 175 years back. He wrote *Raghavendraguru Stotra, Manmathavilasa, Sri Krishna Jayantikatha, Gadayuddha, Sankocha Bharata, Anantakathe* and other works. Vasudeva Vitthala, whose earlier name was Venkataramacharya and later known as Paramahamsa Vyasatatvagna, was a famous saint of the 18th century (1705-1801 A.D.). He was a great devotee of Sri Raghavendraswamy of Mantralaya. He is said to have performed many miracles. He was proficient both in Sanskrit and Kannada. He wrote 13 works in Sanskrit, of which his treatises on *Manasasmriti* and *Upasanabhaga* and his comments on the seventh canto of Bhagavata are well known. In Kannada, he wrote ten *ugabhogas*, sixteen *suladis* and hundreds of *padas*. Praneshadasa (Pranesha Vitthala—1744-1822), whose former name was Yogappa, was born at Lingsugur. He is said to have

served his guru, Jagannathadasa, for nearly sixty years. He was the author of *Partha-Vilasa*, *Veerabhadra-Vilasa*, *Aniruddha-vilasa* and 12 other *Harikathas* and rendered *Vayustuti* into Kannada and composed several *ugabhogas* and *suladis* and hundreds of *padas*.

The other famous Dasas were Panganama Thimmanna Dasa, Kallur Subbannacharya, Guru Pranesha, Sreesha Pranesha Vitthala, Guru Sreesha Vitthala, Ananda Dasa, Modalakal Seshadasa, Sri Varadesha Vitthala, Srinivasa Vitthala, Asigyala Govinda Dasa, Manvi Gundacharya, Lingsugur Padmanabha Dasa, Panduranga Rao Kasbe, etc., and a number of others strove earnestly to continue the Haridasa tradition.

During the 18th century, there were also a good number of Veerashaiva writers. Sanghavibhu of Ganekal wrote *Kumara Vijaya* (a Champoo kavya) and three *Shatakas*, namely, *Basava Shataka*, *Pampa Shataka* and *Bhuvanaika-Nayaki Shataka*. Ganamathadarya was the author of *Bhakti-Sudharasa*, while Kudlur Basavalinga Sharma wrote *Brahmatatva-Ratnakara* and Channamalla Kavi of Deodurg wrote *Karuneshwara-Purana*.

The famous writers of the 19th century were Veerabhadrakavi, the author of *Aravattumuru Puratanara Purana*, Gugal Parappayya who wrote *Anubhava Geethegalu*, Neerukeri Basavalinga Sharana who was the author of *Anubhava Padyagalu* and Mariswamy who also composed *Anubhava Padyagalu*. The late Kaviratna Chennakavi and Maski Basavappa Sastry were famous for their *Puranas*. The famous works of Chennakavi are : *Hemareddy Mallammana Purana*, *Anagal Kumareshwara Purana*, *Sollapurada Nalwathar Veereshwara Purana*, *Mulagunda Balaveera Mahanta Shivayogi Purana*, *Gowlakere Annadaneshwara Purana* and other works.

The research work of late Gorebala Hanumantha Rao of Lingsugur in the field of *Dasa Sahitya* (the literature of Dasas), has brought to light the works of several Dasas (through Varadendra Sahitya Mandala, Lingsugur) who strove hard to propagate the Dasa tradition. He brought out more than 50 works containing *keertanas* of several Dasas. It was also discovered that there were Harijans and Muslims too among the Dasas. During the twenties and thirties of the present century, the literary and cultural activities gained a considerable momentum through the strenuous efforts of Pandit Taranath (1891-1942), an eminent thinker, linguist and social worker, who hailed from South Kanara district but spent many active years of his life in the Raichur region. He attracted a number of devoted followers whom he inspired to work earnestly for the country. He wrote *Dharma Sambhava*, *Dharmada Tirulu* and other works,* which

* The Taranath Memorial Committee, Raichur, is publishing all his works.

are thought-provoking. He was highly proficient in Ayurveda also and trained up many youths in that medical science. He founded the Hamdard High School at Raichur. The late Kallinatha Shastri Puranik wrote *Puranas*, like his father Kaviratna Chennakavi, of which *Sharana Basaveshwara Purana, Gudleshwara Purana, Belwantara Chennabasaveshwara Purana* and *Itagi Bhimambika Purana* are well known. He has written also plays, songs and other works. Late Prof. D. K. Bhimasen Rao of Bidgi in Manvi taluk, who worked as the Head of the Kannada Department of Osmania University, was responsible for fostering Kannada movement in Hyderabad through Kannada Sahitya Mandir and Nizam Karnatak Sahitya Parishat. His literary contributions are *Hadimurane Shatamanada Karnataka, Andhra, Maharashtra Sahitya Avalokana, Shabdamani Darpanada Pathantaragalu Mattu Harikathamrita* and *Humale* (a collection of poems edited), etc.

Late Sri Manvi Narasinga Rao, who worked for the cause of Kannada through Kannada Sahitya Mandir, Hyderabad, contributed to the Kannada literature *Saraswati Tatva* (a collection of essays) and *Kannada Yatre* (a travelogue), etc. He was mainly responsible for organising the Nizam Karnatak Sahitya Parishat. Dr. Panduranga Rao Desai of Benakal in Yelburga taluk, a research scholar and an epigraphist, is the Director of the Kannada Research Institute, Karnatak University, Dharwar. His important works are *Vijayanagara Samrajya, Kuntaleshwara, Minchida Mahileyaru* and 'Basaveshvara and his times'. He has also written a number of research articles and they have been published in various journals. Sri Tawag Bhimasen Rao of Tawag in Lingsugur taluk, a retired Kannada Lecturer, made a notable contribution by establishing Kannada Sahitya Sangha in Gulbarga which has become a nucleus of many Kannada activities. His contributions are mostly in the form of articles or criticisms published in literary journals like Prabuddha Karnataka. Sri Siddayya Puranik (son of the late Sri Kallinatha Shastri Puranik), an administrator, whose pen-name is 'Kavyananda', is one of the present-day eminent poets. His *Manasa Sarovara*, a collection of poems, won him a State award and his *Thuppa Rotti Ge Ge Ge* (children's poems) won him a National award. He has written three dramas namely *Atmarpana, Rajatarekhe* and *Bharataveera*, two collections of stories, namely, *Tusharahara* and *Kathamanjari*, and a novel, namely, *Tribhuvanamalla*. *Sharanacharitamrita* is his other well-known book of life-sketches of sixty-three Sharanas. Besides, he has edited *Kannada Padya Ratnakara, Srikara Prabandhamale, Subodha-Sara, Mahatma Kanakadasa Prashasti* and *Sharanaprasada*. His other works are *Jalapata, Karana Sravana, Kallolamale, Modala Manavanagu, Vikasa Vani, etc.* His brother Sri Annadanayya

Puranik has written *Channabasava Sahitya, Bhageeratha Nyayadarshana, etc.* Dr. S. M. Hunashal, Principal of the Hamdard Higher Secondary School, Raichur, has published several works both in English and Kannada, among which are the Veerashaiva Social Philosophy, *Puratana Sharaneyara Vachanagalu, Bharatada Samskritiya Itihasa* and *Vichara Taranga* (a collection of poems). Pandit D. M. Sharma has published a Kannada work entitled *Amareshwara Purana*. Shantarasa, a teacher by profession, has published a collection of poems called *Musuku-tere* ; he is also the author of *Satyasnehi, Nanjumorevalu* and *Manasagal'i* (poems), and has edited *Siddharama, Kalyanadeepa, Basava Shataka* and other works. Sri Jaithirth Rajpurohit, another administrator, is a noted novelist and a short-story writer. *Suligali*, a novel of his, won him a prize in 1968 in a competition. His other literary contributions are *Paravvana Panchayati, Rohini* (short stories), *Halu Jenu* (novel), *Thungeyangaladalli* (plays in verse) and *Kanakagireesha Charite.* Sri Chandrashekhara Sastry of Raichur has brought out several works on philosophy, while Vidwan Sri Veereshwara Shastry, a journalist and editor of Amaravani (a local monthly), has written a commentary on *Bhava-Chintaratna* of Gubbi Mallanarya. Sri Itagi Raghavendra of Itgi in Yelburga taluk, who is working in the All India Radio at Hyderabad, is a poet and has published *Vasundhara Geetegalu, Sannaddha Bharata, Kshitija Kodanda* and *Belaku Tumbida Balbu*. Sri Gadwal Shankarappa of Raichur, the organiser of Sangadigar Samithi, has been responsible for publication of several books brought out by young writers. He has also written *Avale Ivalu, Brahma Tatva Ratnakara* and *Hariharana Kathegalu.* Prof. T. Srikanthaiah of the L. V. D. College, Raichur, has written *Arivu* (a collection of poems) and *Hariharanu Chitrisiruva Kelavu Sharanaru ;* he has also edited *Shabara Shankara Vilasa.*

To the credit of Sri Chennabasava Swamigalu of Naradagadde, a religious place, are works of literary and spiritual value such as *Savijenu, Swayamprabha, Antaranga* (being collections of his *vachanas*) and *Sri Gurusannidhi.* Sri Kushtagi Raghavendra Rao is working in Mysore University as a research worker on *Dasa Sahitya.* Sri Devendra Kumar Hakari, a Lecturer in Karnatak University, Dharwar, has written *Chinmayi, Ache-Eche, Chelva Kogile* and *Koogutive Kallu,* while Sri Panchakshari Hiremath, another noted writer of Raichur district, has written a novel *Borban Club* serialised in a journal. In addition to the above persons, mention may be made of several others such as Sriyuths : the late Sugaveera Sharma and Manikya Rao, G. Krishna Rao, Jambanna, Hanumanthachar Upadhya, Amarananda, Vasanta Kushtagi, Vasudeva Bhat, Kanthannanavar, Basavaiah, Seetharam Jagirdar and so on who have earnestly contributed to Kannada literature.

Fine Arts

The Hindustani style of music is much cultivated in Raichur district. A few encourage the Karnataka style also. Rajanna and Prabhayya were great names in the field of the Hindustani style. Music-loving persons like the late P. Krishna Rao, Madhava Rao and others formed a music circle to propagate and popularise both the systems of music. Sri Kakadki Srinivasachar, a disciple of the late Mahipati, is a popular *Gavvai*. Among the present musicians of the Hindustani style, some of the popular ones are Sri Narayanachar, Smt. Laxmi Bai and Smt. Yamuna Bai.

There are three music schools in Raichur town, which are privately managed, training youngsters both in vocal and instrumental music. They are: (1) Sri Gururaja Sangeetha Pathashala, (2) Kalaniketan and (3) Sri Sharada Sangeetha Pathashala. Smt. Choodamani is running Bharata Natya classes in the railway station area. There are also a few private music schools at other places like Koppal, Kuknur, etc., encouraging learning of the art of music. Music is one of the subjects being taught to girls in schools. The people of this area also patronise enactment of dramas by amateurs and professional companies from other parts of the State, which, now and then, camp in the towns of the district. Much is not known about the painters of the past. Sri Betdur Shankarappa Gowda from Manvi taluk is proficient in painting and he was trained at Shantiniketan in West Bengal. Sri Alawandi Bhagavantha Rao was a reputed artist. He had been to Germany to obtain higher knowledge in photography. He was the Kulkarni (Shanbhogue) of the village Alawandi in Koppal taluk. He wrote a book in Kannada on photography.

Karnataka Sangha, Raichur

The Karnataka Sangha, Raichur, established in 1928, is the oldest association of its kind in the district. This institution is mainly dedicated to literary and cultural activities. Sriyuths: B. G. Deshpande, R. G. Joshi, Ranga Rao Desai, Venkatasetty, B. H. Inamdar, G. Madhwa Rao, S. Ramakrishna and late Veeranna Master have been some of the pioneers in establishing and developing this Sangha into a fine centre of literary and cultural activities. It has its own building with a fine library, a reading room and an open-air theatre. It has an active team of members on its committee, some of whom are noted writers. It has been conducting *Nadahabba* every year on a grand scale. Under its auspices, the annual session of the Kannada Sahitya Parishat was held in 1934. The late Sri P. Krishna Rao, a social worker, was the guiding spirit behind the institution on the occasion. The Sangha published some books in Kannada, of which *Purandara Smarane* and *Shabara Shankara Vilasa*, brought out during the year 1963-64, are well known.

The institution has been arranging lectures on various subjects by eminent men in the field of Kannada literature. It arranges now and then discussions on cultural topics and *Kavya Vachanas* and honours persons of literary fame. It is under the sponsorship of this Sangha that the Panchayat Raj Training Centre, Raichur, has been conducting successful training courses for the rural leaders. The writers of Raichur and their friends have organised publishing institutions such as Prakash Prakashana, Satyasneha Prakashana, Ravindra Prakashana. Ratnakara Prakashana, S. P. Prakashana and Swayamprabha Prakashana and have brought out several books with a view to encouraging persons with literary abilities to write books. *Prateeka* is a Kannada literary quarterly started by the efforts of Sriyuths : Shantarasa, Jaithirth Rajpurohit, Chandrakant Kushnoor and Rajashekhar Neermanvi.

TABLE 1

Statement showing the number of literates by taluks in Raichur district as in 1951 and 1961

Sl. No.	Name of taluk	1951 (*Literates only*)				1961 (*Literates and Educated*)			
		Males	*Females*	*Total*	*Percentage*	*Males*	*Females*	*Total*	*Percentage*
1	2	3	4	5	6	7	8	9	10
1.	Deodurg	4,830	478	5,308	5.9	9,358	1,654	11,012	10.6
2.	Gangavati	5,816	531	6,347	7.3	14,319	2,903	17,222	15.2
3.	Koppal	15,140	2,266	17,406	11.6	22,008	4,952	26,960	20.6
4.	Kushtagi	8,669	757	9,426	9.26	13,966	1,848	15,814	14.9
5.	Lingsugur	8,062	971	9,033	8.00	15,841	2,496	18,337	13.5
6.	Manvi	7,503	818	8,321	7.09	13,014	2,487	15,501	12.5
7.	Raichur	13,639	3,059	16,698	11.16	25,837	8,061	33,898	13.7
8.	Sindhanur	5,291	292	5,583	7.37	11,249	1,439	12,688	13.0
9.	Yelburga	9,785	654	10,439	10.00	18,365	2,618	20,983	17.9
	Total ..	78,735	9,826	88,561	9.00	1,43,957	28,458	1,72,415	15.66

TABLE 2

Statement showing literacy in towns of Raichur district as in 1951 and 1961

Sl. No.	Name of town	Literates in 1951				Literates in 1961			
		Males	Females	Total	Percentage	Males	Females	Total	Percentage
1	2	3	4	5	6	7	8	9	10
1.	Deodurg	1,072	220	1,292	16.6	1,788	686	2,474	28.9
2.	Gangavati	1,775	315	2,090	12.8	3,190	1,075	4,265	22.4
3.	Koppal	3,421	806	4,227	24.4	4,542	1,616	6,158	31.5
4.	Munirabad (Project Area) ..	2,080	508	2,588	13.4	1,825	699	2,524	39.9
5.	Kushtagi	1,188	237	1,425	23.4	1,680	523	2,203	30.5
6.	Lingsugur	1,325	281	1,606	20.5	1,979	603	2,582	27.0
7.	Mudgal	784	224	1,008	14.3	1,366	307	1,673	18.7
8.	Manvi	778	160	938	11.3	1,340	533	1,873	21.5
9.	Raichur	8,681	2,662	11,343	20.9	15,690	6,484	22,174	35.0
10.	Sindhanur	839	161	1,000	12.8	1,679	504	2,183	23.0
	Total ..	21,943	5,574	27,517	19.6	35,079	13,030	48,109	30.0

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

Early history

PRECISE information about medical institutions in the district in the early days is not available. However, *Ayurveda* and *Unani* systems were the accepted systems in the sphere of medical relief practised all over the country. Ayurveda was developed from the earliest times and the Unani system was introduced during the times of the Muslim rule. The Ayurvedic doctors or *Vaidyas* were very popular and were noted for their knowledge of the medicinal properties of herbs and plants. The afflicted persons went to them to receive medical attention and the cost of the medicines supplied was within the means of the common man. There was no need to depend on costly drugs since herbs and plants, which were freely made use of, were commonly available in the rural areas. Knowledge of several Ayurvedic medicines was common and many household remedies were fairly efficacious for common ailments. In many villages, there were at least one or two families well-versed in the Ayurvedic system of medicine.

During the days of the Muslim rule, the Unani system as practised by Hakims was also popular. But this did not replace the practice of Ayurveda, which was widely prevalent. The Hakims, however, did not penetrate into the rural areas, their practice being generally confined to the urban areas. They were patronised not only by the Muslims, but also by a section of the Hindus. The Ayurvedic *Vaidyas* continued to carry on their practice both in the urban and rural areas and the common people had great faith in them. The Unani system was especially encouraged by the Nizams, the rulers of the Hyderabad State. Even to-day, a considerable number of Ayurvedic practitioners and some Hakims are found all over the district.

With the greater contact with the East India Company and the British officers, the Western system of medicine came into vogue in the country. Nasir-ud-Daula, the sixth Nizam, ushered in the allopathic or the Western system of medicine in Hyderabad State.

The State Medical Department, whose functions were purely curative, came into existence in the year 1844. Except for vaccination against small-pox, there was no organisation for preventive medicine until 1912. Compulsory primary vaccination of children between the ages of six and twelve months was introduced in the State in 1922, during which year the Public Health Department was established. Earlier, in 1913, the Government appointed the Chief of the Medical Department as the Sanitary Commissioner also. Travelling dispensaries, one for each district, were established and they were manned by assistant surgeons who were called the District Sanitary Assistants. At the end of 1934, the Public Health Department was reorganised and a Deputy Director of Public Health was put in charge. The Medical and Public Health Departments were controlled by a Director assisted by two Deputy Directors, one for the medical wing and the other for the public health wing. The Unani units in the district, manned by Hakims, were placed under the State Unani Medical Department. The development of medical institutions in the Raichur district started in 1896 with the inauguration of the Civil Hospital at Raichur. Later on, civil dispensaries were started in several taluk headquarters, both for in-patients and out-patients. Ayurvedic and Unani dispensaries were also located in mofussil centres.

Health and sanitation

Organised public health service in this country is of comparatively recent origin. Till about 1870, the medical services in India were mainly concerned with the improvement of the health of the members of the military services. Though the heavy mortality caused by the out-breaks of epidemics, such as plague, awakened the Government to the need for more active State participation in improving the health of the people, the efforts were confined, till the reforms of 1919, to the promotion of sanitation by making it one of the important duties of the local bodies. Progress was, however, very slow and the first All-India Conference in 1911 noticed that very few towns and villages in India had any system of conservancy. The responsibility for local medical and public health administration was transferred to the Provincial and State Governments under the 1919 reforms. Though this widened the field of the Provincial and State Governments' activities in this direction, the quality of work still suffered from a lack of guidance and supervision over the local bodies to which organisations the work had been entrusted. The result was that only a fraction of the ground had been covered so far. The level of health services was unsatisfactory even in urban areas and the position was much worse in rural parts. Sanitary reform, village planning and housing schemes were practically unknown in the rural parts of the State, while such medical and maternity relief as had been provided, was totally inadequate to meet the needs of the masses.

The Royal Commission on Agriculture remarked in 1928 that in the rural areas of the country, sanitation in any accepted sense of the word was practically non-existent. The bank of a stream or the margin of a tank was commonly used as a public latrine, and this gave rise to hook-worm infestation and to the spread of all the diseases which are caused by a polluted water supply, for in many places the same water was used for drinking as also for bathing. The two outstanding problems connected with rural sanitation were : (1) prevention of soil pollution by indiscriminate defecation and (2) the provision of adequate and pure water supply for the villages. A detailed survey of hook-worm infection was completed in 1927 by the anti--ankylostomiasis campaign of the International Health Board under the Rockefeller Foundation of America and the immensity of the problem was clearly demonstrated. As a result, the Government started the rural sanitation campaign in 1928 for the prevention and control of hook-worm infection in the State. The rural sanitation staff consisted of one sanitation unit which worked in the several districts by rotation. The chief activities of the units were : (1) educational propaganda on prevention of hook-worm infestation and the dangers of soil pollution, (2) hook-worm treatment and (3) provision of latrines in the villages.

After the introduction of community development schemes in the country, and after the establishment of local bodies, *viz.*, Taluk Development Boards and Town Municipalities, health and sanitation became one of the important functions of local bodies, under which primary health centres have been sanctioned, which provide both curative and preventive services in the rural areas. The village panchayats are also taking up rural sanitation work in the areas by way of construction of drains, soak-pits, hand-flush latrines, etc., and also rural water supply schemes to provide wholesome water to the villagers.

Medical relief in rural areas

Till 1924, the amount spent on medical relief in rural areas was only a small fraction of the total expenditure on hospitals and dispensaries in the State. The great mass of the village population had no easy access to qualified doctors and had to be contented with the services of unqualified men. In the year 1924, the Government considered the problem of bringing qualified aid within the easy reach of the rural population and felt that immediate steps should be taken in this direction. The Government realised that the establishment and maintenance of a well-equipped public hospital or dispensary in almost every village or for each small area was not possible and an alternative scheme had to be devised whereby something substantial might be done at once, at least as an earnest of the Government's desire to bring medical relief within the easy reach of the rural population. Accordingly, the Government inaugurated a scheme for

opening subsidised rural dispensaries. Under the scheme, qualified practitioners of both Western and Indian systems of medicine were given small subsidies as an inducement to settle down in selected villages and to set up private practice. The liability of the Government on account of the scheme was restricted to the payment of subsidy for the medical practitioner and the midwife. The cost of medicines and other contingent charges were met by the local boards concerned. The grant of subsidy was subject to the condition that the medical practitioner should give free treatment to the needy. The practitioner was at liberty to accept such fees for medical attendance and treatment as he could get from well-to-do patients. Besides these dispensaries, some rural dispensaries were maintained entirely from the funds of local boards.

Reorganisation of department

The Medical and Public Health Departments of the State were amalgamated in 1965. An officer designated as Director of Health Services was appointed as the head of the re-organised department at the State-level. At the district-level, however, there are two wings under two independent district officers, *viz.*, District Surgeon, who is in charge of the District Headquarters Hospital at Raichur, and the District Health and Family Planning Officer. Both these officers are directly responsible to the Director of Health Services in Mysore, Bangalore.

The District Health and Family Planning Officer, Raichur, is in charge of the public health and family planning wing of the department at the district-level. He is both a technical and administrative officer and deals with matters relating to public health, such as control of epidemics, malaria eradication, maternity and child welfare, vital statistics, sanitation, health education and laboratory work associated with public health. His functions as Family Planning Officer include propaganda on family planning, supply of contraceptives, conducting of camps for vasectomy and tubectomy operations, loop insertions, etc. He has been also in overall charge of all the medical institutions at the taluk-level in the district. Under the family planning programme, he is assisted by a Medical Officer of Health, a Lady Medical Officer, two District Extension Educators (one male and one female), two Health Assistants, a Nurse, a Statistical Assistant, a Projectionist and necessary ministerial and class IV officials. Insofar as the work of the District Laboratory is concerned, the District Health and Family Planning Officer is assisted by a Medical Officer of Health, four Senior Laboratory Technicians and four Laboratory Attenders. Under the Maternity and Child Health Programme, there is a District Nursing Supervisor to assist the District Health and Family Planning Officer. Besides these officers and members of the staff at the district-level, several other technical and other staff at the block-level and the medical

officers and staff of the several medical institutions at the taluk-level, such as Primary Health Centres, Health Unit-type Dispensaries, Combined Dispensaries and Local Fund Dispensaries are also under the administrative control of the District Health and Family Planning Officer.

Vital statistics

In the early days, there was no special agency in respect of registration of births and deaths, other than the village officers. These village officers were required to send monthly returns to the Tahsil Office, from where they were transmitted to the District Office to be then forwarded to the office of the Sanitary Commissioner. With a view to securing better registration of details connected with births and deaths, rules were revised in 1915-16, according to which Inspecting Officers were required to scrutinise entries in the registers. Again in 1918, a new regulation was introduced to improve the system of collection, compilation and publication of vital statistics. According to this new regulation, the entries with reference to births and deaths had to be certified by a technical officer after a sample check-up in the area concerned. This proved helpful in correcting the deficiencies to a certain extent. At present, births, deaths and other related statistics are registered by the village patels in rural areas and sent to the Registrar-General of Births and Deaths through the Tahsildars concerned. In the urban areas, the municipal authorities collect these statistics and send them to the Registrar-General. The Health Inspectors collect the statistics in respect of health-unit areas and during their visits to villages, they take the opportunity of verifying the figures registered by the village officers.

The rise or fall in population of an area can be attributed, to some extent, to the condition of health of the people. There may be other causes like famines and distress conditions, migration of persons from one area to another, etc.

The following table gives the variations in the total population of the district for the first six decades of this century :—

Census year		*Total population*	*Increase or decrease*	*Net variation for sixty years*
1901	..	7,31,301	..	
1911	..	7,82,240	+ 53,939	
1921	..	7,24,140	— 61,100	
1931	..	7,71,890	+ 47,750	
1941	..	8,57,533	+ 85,643	
1951	..	9,53,640	+ 96,107	
1961	..	11,00,895	+ 1,47,255	+ 3,69,594

It is seen from the foregoing figures that the net increase in population in the decade 1951-61 was 1,47,255, the highest during the 60-year period. This high increase is attributable mostly to a falling death rate and a higher birth rate. The fall in the population was only during the decade 1911-1921, which was owing to influenza which appeared in a virulent epidemic form in 1918 (*See* elsewhere in this chapter).

Births and deaths

The following table indicates the number of births and deaths, as also the birth and death rates per thousand, for the period from 1958 to 1966 :—

Year	*No. of births*	*Birth rate per 1,000*	*No. of deaths*	*Death rate per 1,000*
1	2	3	4	5
1958 ..	8,912	8.7	6,411	6.2
1959 ..	11,815	11.4	7,673	7.4
1960 ..	10,869	10.4	5,928	5.6
1961 ..	13,015	12.4	7,116	6.7
1962 ..	13,036	11.6	6,952	6.2
1963 ..	10,155	8.9	5,397	4.7
1964 ..	9,679	8.3	6,628	5.7
1965 ..	7,547	6.3	3,159	3.6
1966 ..	9,710	8.0	6,067	5.0

From the above figures, it can be seen that in recent years the death rate has been generally on the decline; so also the birth rate. The fall in the death rate is owing to the intensive preventive and curative measures undertaken by the public health authorities and also to a better standard of living. There has been a systematic drive to control epidemics and thousands of people have been vaccinated or inoculated. As in the rest of India, fever of different kinds is reponsible for a large number of deaths in the district. The fall in the birth rate may be attributed, to a certain extent, to the intensive family planning drive that is being carried out in the district in the recent years and the growing consciousness among the people, especially among the educated classes, to limit their families. It may, however, be pointed out that the birth and death rates, as recorded in the district, fall much short of the known rates for India. This evidently shows that there are certain omissions in recording the vital events.

Infant and maternal mortality

Infant mortality was considerably high in the district in the early decades of this century. The main causes for these deaths were prematurity, bronchitis, diarrhoea, dysentery, fevers, convulsion, sepsis and respiratory diseases. The following table gives

the number of still-births, infant deaths and the infant mortality rate per thousand in the district for the period from 1958 to 1966 :—

Year	No. of still births	No. of infant deaths	Infant mortality rate per 1,000
1958 ..	534	426	47.8
1959 ..	47	707	59.8
1960 ..	34	507	46.6
1961 ..	75	597	45.7
1962 ..	64	651	49.9
1963 ..	65	464	45.7
1964 ..	80	348	35.9
1965 ..	21	349	46.2
1966 ..	57	534	55.0

Among the main causes of maternal deaths are anaemia, haemorrhage, eclampsia and difficult labour. As in the case of infant mortality, the rate of maternal mortality was high in the early decades and this has been reduced to a great extent by providing facilities for prenatal, natal and post-natal treatment in the several hospitals and health centres in the district. As per the figures furnished by the Director, Bureau of Economics and Statistics, Bangalore, the maternal mortality rate in the district was fluctuating between 5.8 and 3.2 per thousand during the period from 1958 to 1966 :—

Year		No. of maternal deaths	Maternal mortality rate per 1,000
1958	..	46	4.8
1959	..	62	5.5
1960	..	64	5.8
1961	..	43	3.2
1962	..	53	4.0
1963	..	43	4.2
1964	..	46	4.8
1965	..	31	4.1
1966	..	36	3.7

Main diseases

The diseases common to the district can be roughly determined from a reference to the number of patients treated in the District Headquarters Hospital, Raichur. About a decade ago, *i.e.*, during the year 1958, 62,649 out-patients were treated in the

Hospital, for different diseases. The diseases such of which accounted for more than 1,000 patients, were as given below :—

Gonococcal infection	1,429
Dysentery	3,084
Malaria	3,020
Helminthic infection	2,481
Pyrexia	5,672
Vitamin deficiency	1,090
Anaemia	3,453
Asthama	1,030
Diseases of the eye	2,482
Disease of middle ear and mastoid ..	2,754
Upper respiratory tract infections ..	3,141
Influenza	1,650
Bente bronchitis	2,919
Chronic bronchitis	1,682
Teeth and gum diseases	2,332
Gastritis	1,475
Gastro-Enteritis and Colitis ..	1,367

The common diseases for which the majority of patients were treated in the various health centres and dispensaries in the district during the years since 1962 have been respiratory diseases and fevers and dysentery and diarrhoea. These are largely due to the insanitary environmental conditions and the unprotected water supply, especially in the rural areas. The other diseases from which the people generally suffer are typhoid, tuberculosis and vitamin deficiency. The following table indicates the number of deaths caused on account of several diseases during the period from 1962 to 1966 :—

Common diseases

Disease	1962	1963	1964	1965	1966
Respiratory diseases ..	528	493	590	340	484
Dysentery and Diarrhoea	264	210	225	131	203
Typhoid ..	423	254	231	156	233
Fevers ..	2,779	2,173	2,401	1,382	2,497
Tuberculosis ..	270	252	258	309	307

As could be seen from the above figures, the incidence of deaths on account of fevers is greater than that caused by any other type of disease.

Epidemics

When an epidemic breaks out in the district, the health authorities are alerted to work in close co-ordination and under the general direction of the District Health Officer. The health workers tour the area in order to know the extent and severity of the epidemic. All the wells in that area are thoroughly

disinfected with potassium permanganate and the villagers are advised to isolate the sick and to evacuate the houses. People living in the infected areas are discouraged from entertaining friends and relatives. Disinfection and fumigation are intensively carried out wherever possible. It is the duty of the health workers to enquire into and ascertain the causes, origin and spread of epidemic diseases within their jurisdictions and send periodical reports to the nearest medical officer as well as to the District Health Officer. Various conditions injurious to public health are systematically scrutinised and remedied so as to minimise the incidence. Special attention is paid to water supply sources and to the disposal of refuse. During *jatras* and *uruses*, special staff is requisitioned to take precautions and to control any outbreak of epidemics.

The district has been free from plague in recent years. But small-pox and cholera may be said to be still persisting with sporadic outbreaks in some or the other parts of the district. A brief account of each of the epidemics is given hereunder.

Small-pox

Small-pox affects particularly children. It is more prevalent in Raichur, Deodurg and Lingsugur taluks than in other taluks. Vaccination, being the only preventive, is done on a phased scale by the health services staff. The vaccinations are done by duly trained vaccinators—Basic Health Workers, Auxiliary Nurses and Midwives—who are all responsible to the District Health Officer. They are stationed in the headquarters of each taluk and are required to get in touch with the Tahsildar for any assistance in the discharge of their duties. The vaccination work is carried on after a close verification of all birth registers and police patels' registers. Systematic house-to-house inspection of the whole town or village is conducted for detection of unprotected cases. The minimum outturn of work for each vaccinator is about 200 successful vaccinations a month. He is required to carry out not less than 3,000 vaccinations in a year. In case of epidemics, the vaccinators have to rush to the infected areas in order to vaccinate all unprotected children and adults. All factories and schools are visited in an endeavour to vaccinate, in the premises themselves, all those who are not already protected. The schoolmaster and the factory manager are held responsible for obtaining the consent of those who are to be vaccinated. Lymph in sufficient quantity is maintained and excessive storage of it is not permitted due to deterioration in potency, and the stock on hand is kept as far as possible in a cool place. Contra-indications to vaccination are mainly skin diseases, diarrhoea and fever. Re-vaccination, though not compulsory, is essential for protection against small-pox. In re-vaccination cases, the vaccinator will have to see that scarification is not done on the sites of old scars.

In the years 1957 and 1958, there were 291 and 482 attacks respectively in the district, resulting in 76 deaths in 1957 and 141 deaths in 1958. During 1957-58, a total of 1,11,587 vaccinations were done (primary 55,660 and re-vaccination 55,927). The percentage of success in primary vaccniation was 64, while in re-vaccination, it was 28.

The following table indicates the number of small-pox attacks and deaths in the district during the years from 1965 to 1968 :—

Year	*Attacks*	*Deaths*
1965	123	37
1966	239	51
1967	35	12
1968	19	1

From the above figures, it is seen that the incidence of attacks and deaths was greater in 1966 than in other years and it was on a marked decrease in 1968 causing only one death. During the year 1965, a total of 1,35,021 vaccinations was done and in the following year, the work was further intensified and there was a total of 3,76,081 vaccinations. In the years 1967 and 1968, 2,91,985 and 2,71.645 vaccinations respectively were done.

Plague

The district is now free from the ravages of plague. In living memory, it made its first appearance in the district in 1898-99 after its initial outbreak in Bombay and occurred periodically, sometimes in an epidemic form and sometimes in an endemic form. In the year 1940-41, it took a heavy toll of 1,531 persons. In recent years, there has been no incidence of this dreaded disease.

Influenza

The people of Raichur district still remember with horror the influenza epidemic of 1918-19. It first appeared in June July 1918 and soon assumed the form of a whirlwind, sickening a large number of people of the district. The first wave which lasted till September was mild, while the second wave which started in October was the worst both in rural and urban areas. Antibiotics were not in existence then and traditional remedies like the inhalation of irritants did not prove successful. Since the people succumbed to this disease quickly, the population of the district fell by 61,100 as revealed by the census of 1921. In those days, this epidemic was called the Spanish flue. In June 1957, a wave of influenza, called the Singapore flue, affected the entire district. In the Raichur Civil Hospital itself, 1,650 cases were treated during that year. Antibiotics proved quite useful. Municipalities and

health units strove hard to isolate the patients to check the spread of the disease from person to person. The wave slowly disappeared by October 1957. Such a severe flue has not been experienced in the recent past.

Cholera

Cholera recurs periodically, particularly after heavy rains and also in the winter months. This disease has become endemic and sometimes assumes the form of an epidemic, when intensive control measures are put into operation by the public health authorities. Many of the villages are poor in general sanitation, the surroundings being used for indiscriminate defecation resulting in the fly nuisance. There is no protected water supply in most of the villages and water scarcity is acutely felt in summer months when people drink impure water from ponds and pools. However, under development schemes, a number of villages are being provided with drinking water wells.

There was no incidence of cholera during 1959 and 1960, but it made its appearance in the district from 1961. It took a heavy toll during the years 1962 and 1964. Whenever there is an outbreak of cholera, the authorities rush groups of necessary health staff to the places for mass anti-cholera inoculations. Mass inoculations alone cannot check the spread of the disease. It is very necessary that every inhabited place obtains protected water supply facilities. Cholera breaks out often about the month of October and persists for about four months in an epidemic form and then the fury begins to decline giving an endemic character to the disease.

The epidemic was severe in 1950 and 1958 with 2,965 and 1,596 attacks and 1,306 and 576 deaths respectively. In 1958, about 2,21,250 inoculations were done. The following table gives the number of cholera attacks and deaths and the number of persons inoculated during the years from 1964 to 1968 :—

Year	*Attacks*	*Deaths*	*Mass inoculations done*
1964	1,284	358	4,67,654
1965	78	29	16,736
1966	27	9	1,71,239
1967	105	32	10,739
1968	(There was no information of outbreak)		

Leprosy

Leprosy is another disease prevalent in the district, mostly in the taluks of Koppal and Raichur. In 1957, there were 1,489 cases, out of which 546 were in Koppal taluk and 277 in Raichur

taluk. With a view to conducting a survey and providing treatment facilities, a National Leprosy Subsidiary Centre was started at Koppal in 1959-60. It is proposed to upgrade this centre into a National Leprosy Control Centre so as to provide necessary facilities for in-patients.

In 1966, the leprosy work was integrated with health unit-type dispensaries by starting 10 Survey, Education and Treatment Centres at Matmari, Mudgal, Jalhalli, Kanakgiri, Potanhal, Tawargera, Jawalgera and Kuknur. Starting of such centres at other places in the district is under consideration.

The leprosy cases registered during the years from 1966 to 1968 were—1,167 in 1966, 1,014 in 1967 and 1,162 in 1968. The existing facilities are only to survey and give out-patient treatment in hospitals and dispensaries. The staff of the National Leprosy Subsidiary Centre, Koppal, consists of one Medical Officer, one Medical Social Worker, four Para-Medical Assistants and one Pharmacist, assisted by clerks and others. Each of the Survey, Education and Treatment Centres has a para-medical worker.

Malaria

As in the case of old Mysore, in the Raichur district also the malaria control work was in progress at Munirabad even before the plan periods. An Anti-Malaria Scheme was inaugurated at Munirabad on 10th February 1947 and malaria survey and control schemes were undertaken in the first 20 square miles from the Tungabhadra dam site. In 1948, the control measures and survey work were extended to Gangavati—to a distance of 30 miles. In April 1954, the Anti-Malaria Scheme of the project came under the National Malaria Control Programme, the headquarters being located at Munirabad. After the formation of the new Mysore State, however, a full-fledged unit was started (in 1958) at Raichur and the whole of the district was divided into four sub-units, *viz.*, (1) Munirabad sub-unit comprising Koppal and Gangavati taluks, (2) Kushtagi sub-unit with Kushtagi and Yelburga taluks, (3) Sindhanur sub-unit with Sindhanur and Lingsugur taluks and (4) Yermaras sub-unit with Manvi, Raichur and Deodurg taluks.

The Malaria Control Programme was switched over to Malaria Eradication Programme during 1962, followed by the Consolidation and Maintenance phases. Special attention is being paid to the project areas, refugee and rehabilitation centres (refugees from Burma and Ceylon) and the like. Usually, two rounds of insecticidal sprayings (DDT 50 per cent) are given in all the vulnerable areas of the unit. The vector species—A. culicifacias is still susceptible to DDT in this area. In some parts of the unit areas, there is a certain amount of refusals for insecticidal spraying. In 1957, there were 6,335 malaria cases

which came for treatment in the various hospitals of the district, of which 3,092 cases were treated in Raichur town alone.

The following table shows the number of positive cases detected by the surveillance workers, the number of blood smears collected and the preventive measures undertaken during the years from 1964 to 1968 :—

Year			*Number of positive cases detected*	*No. of blood smears collected*	*No. of houses sprayed with DDT*
1964	..	..	216	1,24,744	1,24,828
1965	..	..	227	1,25,103	1,28,761
1966	..	..	75	1,19,794	1,24,033
1967	..	..	137	1,84,895	16,670
1968	..	..	56	2,30,277	48,665

The staff pattern of the National Malaria Eradication Unit, Raichur, is as given below :—

1.	Medical Officer of Health	..	1
2.	Assistant Unit Officer	..	1
3.	Senior Malaria Inspectors	..	4
4.	Junior Malaria Inspectors	..	4
5.	Malaria Surveillance Inspectors	..	32
6.	Malaria Surveillance Workers	..	133
7.	Superior Field Workers	..	10
8.	Senior Microscopist	..	1
9.	Junior Microscopists	..	6

These are assisted by one mechanic, five drivers and necessary ministerial and class IV officials.

Medical and Health Institutions

As per the statistics furnished by the Bureau of Health Education, Directorate of Health Services, Bangalore, there were, in 1960, three hospitals, 17 dispensaries, eight health centres of Government of India type, three family planning clinics (one urban and two rural) and one district laboratory in Raichur district. Of the three hospitals, two were general hospitals and one was for women, all the three being Government hospitals; 13 dispensaries were located in the rural areas. The population served per institution, on an average, was 60,692.8, while the average area served per institution in square miles was 224. There were ten anti-rabic centres attached to the Headquarters Hospital, Raichur, and to Government dispensaries at Gurgunta, Gangavati, Deodurg, Koppal, Kushtagi, Lingsugur, Manvi, Yelburga and Sindhanur. There were 24 doctors employed, of whom 23 were male doctors and only one was a lady doctor.

Under the reorganisation of the Medical and Public Health Departments in 1965, all the medical institutions at the taluk-level were transferred to the control of the District Health and Family Planning Officer. In March 1969, there were fifteen primary health centres of Government of India pattern, eight combined dispensaries, two Government dispensaries, three reduced-scale local-fund dispensaries and sixteen health unit-type dispensaries in the Raichur district under the charge of the District Health and Family Planning Officer. There was one District Hospital under the charge of the District Surgeon at Raichur.

District Hospital, Raichur

The District Hospital, Raichur, was founded in 1896 and was located in the crowded part of the Raichur city outside the walls of the inner fort, having a bed-strength of 60 and the office of the Civil Surgeon was located outside the hospital compound. Now, the District Hospital is working in a new building constructed at a cost of about Rs. 11½ lakhs and opened in 1962 near the Ganj, with a bed-strength of 148. Again, in July 1969, a first floor, built at a cost of Rs. 1,05,000 was added on to the building. There is also a plan to construct six more wards at a cost of rupees four lakhs to make provision for 120 beds more.

There is no separate women's and children's hospital, but there is a maternity wing attached to the District Hospital, where maternity cases are admitted. The hospital has also a well-equipped surgical unit. The other units that are functioning in the District Hospital are: (1) X-Ray Unit (200 M.A.), (2) Blood Bank, (3) Ear, nose and Throat Department, (4) T.B. Clinic and (5) Urban Family Planning Unit. All the units of the District Hospital are having well-qualified staff.

According to the figures furnished by the District Hospital for the calendar year 1957, a total number of 2,774 in-patients were admitted for treatment, of whom 987 were men, 1,587 women and 200 children. The number of beds in the hospital during that year was 34 for men and 50 for women and children. The daily average attendance of the in-patients was 79.3. In the out-patient wing, a total number of 62,649 persons were treated, of whom 19,434 were men, 18,686 women and 24,529 children. The total expenditure incurred on the hospital for the year 1957 was Rs. 80,049.

During the calendar year 1968, a total number of 3,449 in-patients were admitted for treatment, of whom 1,254 were men, 1,752 women and 443 children. The total number of beds in the hospital was 220. The daily average in-patient attendance was 119.00. In the out-patient wing, a total number of 99,827 persons were treated, of whom 46,666 were men, 34,048 women and

19,113 children, the daily average attendance being 273.50. The total expenditure on the hospital for 1968 was Rs. 2,05,231.

The following figures show the major, minor and maternity operations done in the District Hospital during the years 1957 and 1968 :—

Year	*Major operations*	*Minor operations*	*Maternity operations*
1957	295	1,384	106
1968	533	574	674

T. B. Clinic, Raichur

There is also a T.B. Clinic in Raichur town manned by a Medical Officer. This Medical Officer is assisted by an Assistant Medical Officer along with one T.B. Health Visitor, one Laboratory Technician and one X-Ray Technician. The clinic, which was started in March 1956, was formerly functioning in a municipal building in the centre of the town. Now it is functioning in the new building of the District Hospital, where there is sufficient accommodation. Ever since its establishment, it has been under the control of the District Surgeon, Raichur. Necessary anti-T.B. drugs are being supplied by the UNICEF. Proposals for upgrading this T.B. Clinic into that of a District T.B. Centre are under consideration of the Government.

Ever since its inception, the T.B. Clinic has been attending to sputum examinations, blood tests, urine tests, etc. In the year 1958, 17,543 old cases were treated and 3,907 fresh cases were attended to. In that year, 3,485 sputum examinations were done as against 347 and 1,353 in the years 1956 and 1957 respectively. These examinations showed that tuberculosis of the lung was rampant in the district. In 1968, 38,479 cases of various types were attended to and a sum of Rs. 26,554-75 was expended on the institution.

District Health Laboratory

A laboratory to provide facilities at the district-level to the medical institutions and medical practitioners was established at Raichur in 1958-59. Various pathological tests are being conducted in the laboratory and the number of such tests done during the years 1959, 1963, 1967 and 1968 is shown in a statement given at the end of the chapter. Investigations on the causes and prevention of the guinea-worm disease is also proceeding in the laboratory.

Primary Health Centres

There are 15 Primary Health Centres of Government of India pattern established in the rural parts of the district during

the successive Five-Year Plan periods, with a view to extending medical aid to more and more people. Each centre covers a population of sixty thousand and the bed-strength, on an average, is six. These Health Centres which provide instant remedial measures to needy patients are gaining popularity in the rural areas.

The staff sanctioned to each of the Primary Health Centres consists of one Medical Officer of Health, a Health Visitor, a Junior Health Inspector, a Pharmacist and two class IV workers. Besides, to look after the family planning aspect of the work, there is also an Extension Educator, a Computor and a Health Assistant for every 20 to 30 thousand population and an Auxiliary Nurse-Midwife for every ten thousand population, under the Medical Officer of Health. Similarly, to look after the malaria maintenance work, there are a Senior Health Inspector, a Junior Health Inspector and a Basic Health Worker for every ten thousand population.

The following table shows the bed-strength in the hospital and combined dispensaries of the district as in 1957 and 1968 :—

Name of Hospital or Dispensary	*Bed-strength*	
	1957	1968
1. District Hospital, Raichur	84	220
2. Civil Dispensary, Lingsugur	4	10
3. Civil Dispensary, Sindhanur	2	4
4. Civil Dispensary, Deodurg	4	20
5. Civil Dispensary, Yelburga	4	4
6. Civil Dispensary, Kushtagi	4	12
7. Civil Dispensary, Koppal	8	20
8. Civil Dispensary, Manvi	4	4
9. Civil Dispensary, Gangavati	4	16
Total	118	310

Ayurvedic and Unani Dispensaries

There are some Ayurvedic and Unani dispensaries in the district, located mostly in the rural areas, catering to the needs of the rural population. As in March 1969, there were 29 such institutions in the district, of which five were Government Ayurvedic Dispensaries, 12 Ayurvedic Dispensaries under the local bodies and six Government Unani Dispensaries. It is proposed to open one more Ayurvedic Dispensary at Pamankallur in Manvi taluk. The technical control of these institutions is vested with the District Health and Family Planning Officer, since April 1968. A list showing the locations of these Ayurvedic and Unani dispensaries, the total number of persons treated in each during 1968-69

and the total expenditure incurred on each of them during that year is given at the end of this chapter.

Hutti Gold Mines Hospital

The Hutti Gold Mines Hospital caters to the needs of the workers of the mines as well as others. Medical, surgical and obstetrical emergencies are given top priority for treatment. A small clinical laboratory and an X-ray unit are attached to the hospital. The staff of the hospital consists of three Medical Officers (including a Lady Medical Officer) assisted by two Supervisors, seven Staff Nurses, three Nursing Aids, two dressers, four ward boys, two pharmacists and one laboratory assistant. The number of patients treated during 1968-69 was 1,45,104, of whom 17,581 were in-patients and the rest out-patients. The total expenditure incurred on the maintenance of the hospital during that year was about Rs. 1,64,890. (*See* also Chapter V under Welfare Amenities).

Railway Health Unit, Raichur

A Health Unit was established in the Railway Colony, Raichur, on 19th September 1963 with the object of providing medical facilities to the railway employees residing at Raichur. It is under the supervision of the medical branch of the Southern Railway Divisional Office, Guntakal. There are seven medical workers in the Health Unit, while the conservancy staff consists of 41 workers. There is no provision for the treatment of in-patients. The number of out-patients treated during the year 1968-69 was 10,826 and the expenditure incurred on the institution was Rs. 1,40,000. There is also a Catholic Dispensary at Jawalgera, started in 1947, and this chritable institution has been serving the medical needs of the people of that area.

Family Planning Programme

The Family Planning Programme has assumed considerable importance in recent years because of the alarming increase in the growth of population and the consequent need for checking it. A State Family Planning Board has been functioning in the State since the year 1957. There is a District Family Planning Committee at Raichur, consisting of both official and non-official members, for implementing the family planning programme in the district. The family planning activities comprise mainly family planning services, training of workers and educating the public about the needs and methods of family planning.

As a first step in this direction, an Urban Family Planning Centre attached to the Civil Hospital, Raichur, was sanctioned during 1957-58 and is being continued. Later, 15 rural family planning centres were started and attached to the Primary Health Centres of the district. In 1969, there were, in all, 16 family planning centres, providing family planning facilities to the people in their respective areas.

Vasectomy and Tubectomy

Facilities have been provided in all bigger medical institutions in the district for conducting vasectomy and tubectomy operations. In order to popularise these surgical methods of family planning, the services of private medical practitioners are also utilised on payment of a subsidy of Rs. 25 per operation. Vasectomy camps are organised in the taluk headquarters in the primary health centres and also in important village centres. Medical advice on the methods of family planning is given to married persons, who require such advice, and also to those women who, in the opinion of the medical officer, cannot undergo the strain of pregnancy and parturition without danger to their health. Besides, the primary health centres in the district also conduct couple surveys and selected couples are advised through individual contacts to adopt temporary or permanent family planning methods. A new device of family planning for women, popularly known as the loop (intra-uterine contraceptive device) was introduced in the district in 1965.

Contraceptives such as jellies, diaphragms and *nirodhs*, etc., were supplied to all the family planning centres, hospitals and dispensaries in the district for distribution among the people. Intensive propaganda through lectures, film shows, exhibitions, publicity literature, etc., is done throughout the district to educate the public in respect of family planning. In addition, family planning fortnights are organised every year throughout the district, when as many people as possible are covered under the programme. Orientation training camps are also conducted at certain selected centres for providing training to village leaders.

Family planning activities were accelerated during the latter part of the Third Five-Year Plan and the subsequent annual plans. Compared to the female population of the district, the response from women has not been as much encouraging as in the other districts of the State. As against the set target of 10,140 loop insertions in 1965-66, only 520 women availed of this facility, while in 1966-67, 2,488 women were covered under this programme. There was a decrease in the number in 1967-68 in that only 1,284 loop insertions were done during that year. During the subsequent year, as against a target of 5,200, only 435 loop insertions were done, thus showing a further decrease in the number availing this facility. Similarly, against a set target of 1,014 for sterilisation operations, only 157 underwent sterilisation in 1965-66. In the following three years, *viz.*, 1966-67, 1967-68 and 1968-69, as against a set target of 3,430, 3,760 and 7,800 respectively, 1,978, 2,784 and 5,467 persons underwent sterilisation operations.

The following table indicates the number of vasectomy and tubectomy operations performed since 1961 :—

Year			Sterilisation operations for		Total
			Males (Vasectomy)	Females (Tubectomy)	
1961	..	..	2	4	6
1962	..	..	10	3	13
1963	..	..	31	1	32
1964	..	..	173	12	185
1965	..	..	95	4	99
1966	..	..	615	13	628
1967	..	..	2,630	9	2,639
1968	..	..	5,678	21	5,699

It is seen from this table that an awareness of the need for family planning has grown in recent years, more among men than among women, in the district.

Maternity and Child Health Services

Domiciliary midwifery work is attended to by the auxiliary nurse-midwives and midwives attached to the primary health centres, health unit-type and local fund dispensaries. Institutional midwifery work is attended to in the various hospitals. The UNICEF has provided a vehicle to each of the primary health centres at Sindhanur, Koppal, Kanakgiri and Jalhalli for attending to the maternity and child health services. In 1968-69, there was only one Maternity and Child Health Centre, attached to the District Hospital, Raichur, apart from a Maternity Centre at Gunjahalli run under the auspices of the Kasturba Gandhi National Memorial Trust.

Applied Nutrition Programme

An Applied Nutrition Programme has been in operation in the Raichur district since the year 1963-64. The programme was first started in the Gangavati Community Development Block and later it was extended to Kushtagi, Lingsugur and Yelburga Blocks during the years 1967-68, 1968-69 and 1969-70 respectively. Diet and clinical nutrition investigations were conducted in the selected villages of the Applied Nutrition Programme Blocks of the district. In general, the dietary pattern of many families revealed that the use of single cereal and single pulse was very common and the intake of other protective foods like green leafy vegetables, milk and milk products, fruits, etc., was negligible. It was found that there was 52 per cent of Vitamin A deficiency, 24.5 per cent of Vitamin B deficiency, and 11.4 per cent of Vitamin C deficiency among the vulnerable population, *viz.*, the pregnant women, nursing mothers and children upto the age of 14.

To improve the existing dietary pattern, several measures have been taken by the health authorities in the selected blocks. Some of the health services personnel have been specially trained under the Applied Nutrition Programme. People are being advised

by them to use mixed cereals like wheat and jowar or ragi and jowar in the diet instead of a single cereal along with green leafy vegetables which are not only nutritious but also available locally at cheaper rates. They are also being advised to use the leafy tops of vegetables like carrot, radish, knol-khol, etc. As a first step in this regard, proper methods of cooking and storage practices are being suggested.

Health Education

Health education forms one of the important activities of the Health Services Department. The basic health workers, who primarily attend to this aspect of work in the district, are required to utilise every opportunity, especially during village gatherings, to contact the rural populace and talk to them about various health subjects, sometimes giving practical demonstrations, with reference to personal cleanliness, environmental sanitation, chlorination of water, vaccination, D.D.T. spraying, etc. The Department also arranges for the observance of the World Health Day, Leprosy Day, Anti-Fly Week, Family Planning Fortnight and the like in the district so as to impart health education to the people. On such occasions also, the health services authorities make arrangements to give talks, organise exhibitions and screen films on various health subjects in the villages and towns.

School Health Services

The aim of the School Health Programme is to provide comprehensive health care to the school children comprising medical examination, treatment, correctional remedies and follow-up action, school sanitation, proper water supply and provision of playgrounds, health education in schools, etc. During the year 1965-66, only one Primary Health Centre at Jalhalli was attending to school health service in the district. The service was extended to two more Primary Health Centres at Mudgal and Potanhal during the year 1968-69. The number of schools selected and the number of children covered by each of the three Primary Health Centres during 1968-69 were as follows:—

Name of Centre			*Number of schools selected*	*Number of children covered*
Jalhalli	..	..	20	1,082
Mudgal	..	..	17	2,013
Potanhal	..	..	15	823
	Total	..	52	3,918

Medical personnel

According to the Census Report of 1961, there were 249 persons working as Physicians, Surgeons and Dentists in the Raichur district. Of the 249 persons, 242 were men and only seven were women; of them, 171 men and four women were working in towns.

Then there were 539 persons working as nurses, pharmacists and health technicians, of whom 432 were men and 107 were women. Of these persons. 172 men and 46 women were working in the urban areas, while 260 men and 61 women were serving in the rural areas.

During the year 1967, there were 107 Ayurvedic, seven Unani and twelve Integrated registered medical practitioners in the district, while during the subsequent year, *i.e.*, 1968, the numbers of these practitioners were : Ayurvedic 158, Unani 13 and Integrated 12. There were also 30 registered Homeopathic practitioners in the district in 1969.

Chemists and Druggists

According to the figures furnished by the Drugs Controller for the State of Mysore, there were, in 1968-69, 45 chemists and druggists and 34 registered pharmacists in Raichur district. In that year, seven licences were cancelled, three were suspended and a fine of Rs. 1,410 was imposed.

Indian Medical Association, Raichur

A District Medical Association was started at Raichur in January 1940. It had a president, an honorary secretary and nine other members, of whom five were working in Government institutions and six were private practitioners. It was rendering free medical service during epidemics, conferences, etc. After a couple of years, the body was affiliated to the Indian Medical Association and its name was changed to Indian Medical Association, Raichur. The Association convened the 3rd Hyderabad State Medical Conference at Raichur in 1951, which was attended to by more than 300 delegates. Again, in October 1967, it held the 34th Mysore State Medical Conference at Raichur. On this occasion, the Association brought out a souvenir containing useful articles by eminent persons in the field of medicine. In 1967, this branch consisted of 21 members. The number of members increased to 56 in 1969 (including 35 men and 4 lady doctors working in Government institutions and 17 private medical practitioners). The Association has its own well-furnished building and owns a modest library. It has a 15 mm. projector to carry on health propaganda.

TABLE 1

Statement showing the location of Health Centres and Dispensaries in Raichur district (taluk-wise) and the number of patients treated and expenditure incurred during 1968-69.

Sl. No.	Name of dispensary with location	No. of in-patients treated	No. of out-patients treated	Total expenditure incurred
1	2	3	4	5
	Raichur taluk			
				Rs.
1.	Primary Health Centre, Matmari ..	..	4,565	41,/09
2.	Primary Health Centre, Mallapur ..	..	14,164	11,187
3.	Health Unit-type Dispensary, Kalmala.	..	8,733	13,279
4.	Health Unit-type Dispensary, Chandarbanda.	..	9,319	14,300
5.	Health Unit-type Dispensary, Gunjahalli.	..	6,117	12,381
	Manvi taluk			
1.	Primary Health Centre, Potauhal ..	71	7,455	21,010
2.	Primary Health Centre, Kavital ..	..	13,070	24,666
3.	Combined Dispensary, Manvi ..	77	18,777	21,705
4.	Health Unit-type Dispensary, Kurdi	..	11,900	..
5.	Health Unit-type Dispensary, Sirvar	..	13,408	..
6.	Health Unit-type Dispensary, Biagwat.	..	3,224	7,907
	Sindhanur taluk			
1.	Primary Health Centre, Jawalgera	35	12,930	47,917
2.	Combined Dispensary, Sindhanur ..	1,376	16,538	20,916
3.	Reduced-Scale Local Fund Dispensary, Turvihal.	..	5,214	10,116
4.	Health Unit-type Dispensary, Balganur.	..	8,588	10,597
	Koppal taluk			
1.	Primary Health Centre, Hiresindogi	18	5,562	42,966
2.	Primary Health Centre, Kavalur ..	..	96,771	32,781
3.	Combined Dispensary, Koppal ..	142	27,472	38,349
4.	Combined Dispensary, T.B.P. (Project), Munirabad.	142	26,871	42,396
5.	Health Unit-type Dispensary, Kinhal.	..	13,695	14,035
6.	Health Unit-type Dispensary, Hittanhal.	..	9,470	11,245
7.	Health Unit-type Dispensary, Irkalgad.		Not available	
9.	National Leprosy Centre, Koppal ..	..	755	39,304

TABLE 2

List of Ayurvedic and Unani Dispensaries in Raichur district with their location and number of patients treated and expenditure incurred in 1968-69.

Sl. No.	Name of Dispensary with location	No. of patients treated	Expenditure incurred
1	2	3	4
	Raichur taluk		
			Rs.
1.	T.D.B. Ayurvedic Dispensary, Yergera	5,808	4,198
2.	Government Unani Dispensary, Raichur	20,357	23,830
	Manvi taluk		
1.	Government Ayurvedic Dispensary, Bagalwad	5,035	4,518
2.	T.D.B. Ayurvedic Dispensary, Kallur	7,883	7,439
3.	Government Unani Dispensary, Rajolibanda	10,870	8,380
	Sindhanur taluk		
1.	T.D.B. Ayurvedic Dispensary, Walkamdinni	N.A.	N.A.
	Gangavati taluk		
1.	T.D.B. Ayurvedic Dispensary, Venkatagiri	6,632	3,839
2.	do Nandihalli	6,660	3,879
3.	do Agoli	4,739	3,582
4.	do Hulihaidar	5,724	4,132
5.	do Gowripur	2,056	4,122
6.	do Hanwal	3,021	2,712
7.	Government Unani Dispensary, Anegundi	N.A.	N.A.
8.	Government Unani Dispensary, Naoli	5,976	11,632
	Koppal taluk		
1.	Government Ayurvedic Dispensary, Ginigera	3,396	4,675
2.	Government Ayurvedic Dispensary, Kinhal	3,265	3,914
	Yelburga taluk		
1.	T.D.B. Ayurvedic Dispensary, Hirewankal-Kunta	3,809	3,378
2.	T.D.B. Ayurvedic Dispensary, Tadkal	12,402	5,257
	Lingsugur taluk		
1.	Government Ayurvedic Dispensary, Maski	4,687	5,019
2.	Government Unani Dispensary, Medikinal	3,753	9,001
	Deodurg taluk		
1.	Government Ayurvedic Dispensary, Gabbur	3,208	3,858
2.	T.D.B. Ayurvedic Dispensary, Koppal	3,650	4,293
3.	Government Unani Dispensary, Ramdurg	5,400	6,588

T.D.B.=Taluk Development Board ; N.A.—Not available

1	2	3	4	5
	Gangavati taluk			
1.	Primary Health Centre, Kanakgiri	59	9,853	69,321
2.	Combined Dispensary, Gangavati ..	3,287	31,433	55,635
3.	Health Unit-type Dispensary, Anegundi.	..	11,419	12,353
4.	Health Unit-type Dispensary, Siddapur.	..	12,018	5,037
5.	Health Unit-type Dispensary, Karatgi.	..	12,483	13,735
6.	Health Unit-type Dispensary, Naoli.	..	3,196	12,341
	Yelburga taluk			
1.	Primary Health Centre, Mangalur ..	..	7,960	16,930
2.	Primary Health Centre, Kuknur ..	31	9,138	47,696
3.	Government Dispensary, Yelburga	29	6,659	3,455
	Kushtagi taluk			
1.	Primary Health Centre, Tawargera..	..	9,037	4,433
2.	Primary Health Centre, Chalagera	..	7,589	31,281
3.	Combined Dispensary, Kushtagi ..	630	10,620	22,346
4.	Reduced-Scale Local Fund Dispensary, Hanamanahal.	..	4,671	7,650
5.	Reduced-Scale Local Fund Dispensary, Hanamsagar	..	6,677	8,240
	Lingsugur taluk			
1.	Primary Health Centre, Mudgal ..	..	13,871	38,338
2.	Primary Health Centre, Anahosur ..	..	12,760	24,635
3.	Combined Dispensary, Lingsugur ..	91	15,714	26,073
4.	Government Dispensary, Gurgunta	10	8,529	13,632
5.	Health Unit-type Dispensary, Gejjalagatta.	..	3,165	14,322
	Deodurg taluk			
1.	Primary Health Centre, Jalhalli ..	15	6,334	41,300
2.	Medical and Primary Health Unit, Deodurg.	126	26,363	56,845
3.	Health Unit-type Dispensary, Arkera.	..	16,190	8,841

TABLE 3

Statement showing the number of pathological tests done at the District Laboratory at Raichur during the years 1959, 1963, 1967 and 1968

Year	*R.B.C.*	*Blood for total count*	*Blood for Defl. count*	*Blood for HB %*	*Blood for ESR.*	*Blood for CT. & BT.*	*Blood for Wiadl*	*Blood for Sugar GTT.*	*Blood for Urea*	*Blood for VDRL.*
1	2	3	4	5	6	7	9	8	10	11
1959 ..	..	185	185	285	162	..	..	..	..	134
1963 ..	402	1,511	1,494	596	567	..	..	..	..	420
1967 ..	..	1,640	1,640	1,510	1,584	..	11	10	11	758
1968 ..	52	2,277	2,310	2,507	1,906	1,366	57	41	28	1,391

Year	*Blood for Calcium*	*CSF Analysis*	*Semen Exam.*	*Sputum for T.B.*	*Skin Chipping*	*F.T.M.*	*Urine analysis*	*Motion analysis*	*Smear for Diptheria*	*Blood for M.P.*
1	12	13	14	15	16	17	18	19	20	21
1959 ..	..	..	..	64	9	..	1,575	206	..	56
1963 ..	..	..	..	61	22	..	3,196	322	..	507
1967 ..	..	30	85	551	30	85	2,316	323	..	363
1968 ..	1	24	18	426	22	94	2,383	427	4	4

CHAPTER XVII

OTHER SOCIAL SERVICES

THERE is a considerable labour population in the district of Raichur that is being benefited by the several labour laws. The need to impose statutory safeguards was felt after years of exploitation of labour, when it was realised that an honest attempt to ameliorate the conditions of labour could not be postponed any longer. Several conventions agreed to at the annual gatherings of the international labour conferences formed the basis of labour legislation in Hyderabad as elsewhere. Some of the laws were derived from the Central statutes. These statutes ensured the fixation of wages, prompt payment, leave benefits, settlement of disputes through conciliation and adjudication, lay-off benefits, weekly closure of industrial establishments, payment of compensation in the event of termination, retrenchment and injury or death while at work. Maternity leave for women workers, rights under Industrial Disputes Act, establishment of canteens and welfare centres and the like were also guaranteed. The period after achievement of Independence has seen the enactment of several more labour laws, which were, by and large, amendments to the existing laws, but helping towards the smooth and orderly implementation of the statutes. The idea is now gaining ground that arbitration should replace adjudication so as to facilitate the smooth settlement of industrial disputes. The benefits of provident fund have been made applicable to a number of establishments where the employers have been made to deposit the contributions with the provident fund organisation, so as to safeguard the interests of labour. The employers are by law made to notify vacancies to the nearest Employment Exchange.

Labour welfare

The following labour laws are in force in the district: (1) Industrial Disputes Act, 1947; (2) Indian Trade Unions Act, 1926; (3) Payment of Wages Act, 1936; (4) Minimum Wages Act, 1948; (5) Factories Act, 1948; (6) Weekly Holidays Act, 1942; (7) Employment of Children Act, 1938; (8) Motor Transport Workers Act, 1961; (9) Mysore Beedi Industrial Premises (Regulation of Conditions of Work) Act, 1964; (10) Workmen's Compensation Act, 1923,; (11) Industrial Employment (Standing Orders) Act, 1946; (12) Mysore Industrial Establishments (National and Festival Holidays) Act, 1963; (13) Payment of

Bonus Act, 1965; (14) Mysore Shops and Establishments Act, 1961, and (15) Employees Provident Fund Act, 1952.

All the above Acts are in force in all the taluk headquarters and other industrial centres of the district. The Commissioner of Labour is the Chief Conciliation Officer and Registrar of Trade Unions. The Factories Act and the Payment of Wages Act are enforced by the Chief Inspector of Factories and Boilers. The Employees Provident Fund Act is administered by the Regional Provident Fund Commissioner, a Central Government Officer. The authority for enforcing all other Acts is vested with the Commissioner of Labour assisted by various subordinate officers.

The enforcement of all labour laws in the district of Raichur has been entrusted to the Labour Officer who has his headquarters at Raichur. He is under the control of the Assistant Labour Commissioner, Bellary, who is responsible to the Commissioner of Labour in all matters pertaining to the administration of the Department. There are four Labour Inspectors in the district: their headquarters and jurisdictions are noted below:—

(1) Labour Inspector, I Circle, Raichur .. (i) Raichur town
(ii) Deodurg taluk

(2) Labour Inspector, II Circle, Raichur .. (i) Raichur taluk (except Raichur town).
(ii) Lingsugur taluk.
(iii) Manvi taluk.

(3) Labour Inspector, Gangavati .. (i) Gangavati taluk.
(ii) Sindhanur taluk.
(iii) Kushtagi taluk.
(iv) Yelburga taluk.

(4) Labour Inspector, Koppal .. (i) Koppal taluk.

All the above Labour Inspectors are notified as Inspectors under the Mysore Shops and Commercial Establishments Act, the Payment of Wages Act, the Weekly Holidays Act, the Motor Transport Workers Act and the Mysore Beedi Industrial Premises (Regulation of Conditions of Work) Act. They are responsible for enforcing the provisions of the above Acts in shops, establishments, etc., in their respective jurisdictions. They have to go round and find out whether employers are discharging their statutory obligations and whether there is any departure from the accepted standards.

Shops and Establishments

The Mysore Shops and Commercial Establishments Act, 1961, is a social legislation for protecting the employees engaged in

organised employment except where the Factory Act is applicable. This Act was brought into force in the district with effect from 1st October 1964, when the Hyderabad Shops and Establishments Act, 1951, was repealed. The Act is in force in all the taluk headquarters of the district, which have a number of retail establishments employing workers. The new Act requires compulsory registration of every establishment by remitting the prescribed fee and compliance with the various provisions of the Act by the employer. It aims at ameliorating the working conditions of thousands of employees belonging to the lower middle class. Prosecutions are launched against employers who fail to follow the provisions of the Act. Weekly holiday and facilities of annual leave with wages and sickness leave and rest interval are extended to the workers employed in shops and establishments. Children are prohibited from working in shops and establishments even though they might belong to the family of the employer. The employer cannot dispense with the services of the employees at any time he pleases; termination notices should be in writing allowing for one month's notice or payment of salary in lieu of it. The aggrieved parties can go to a Labour Officer and proceed against the erring employer. The Inspector, Shops and Establishments, who works under the Labour Officer, is required to tour constantly in his area in order to safeguard the interests of workers.

Minimum Wages Act, 1948

During the Second Five-Year Plan, the Minimum Wages Act, 1948, was enforced for agricultural labour in Raichur district. The Labour Inspectors stationed at Raichur, Koppal and Gangavati are required to contact land-owners and agricultural workers to explain the provisions and to see that they are complied with. The provisions of this Act relating to the general labour also have been brought into force in the municipal limits of all the taluk headquarters. The Act provides for the fixation of different rates of minimum wages considered appropriate for the different categories of scheduled employment. Besides agricultural labour, minimum wages have also been fixed in respect of workers employed in stone-breaking, road construction and building operations, oil mills, rice-mills, ginning and pressing factories, printing presses, hotels and restaurants, etc. The Labour Officer, Raichur, who is notified as the Inspector for the purpose, has jurisdiction over the entire district of Raichur.

Industrial disputes

Whenever a dispute occurs in the industrial sphere, conciliation proceedings are initiated by the Labour Officer, who hears the parties and endeavours to bring about a reasonable settlement between the parties to the dispute, and if the dispute ends in an agreement, a memorandum of settlement is drawn up and the same is forwarded to the parties under a copy submitted to the Government. If the conciliation proceedings result in a failure, a failure report is submitted to the Government and the matter

would then be referred, if it merits reference, to the Labour Court or to an Industrial Tribunal, as the case may be, for adjudication and award. If a dispute does not merit reference for adjudication, it is then recommended for rejection and the parties to the dispute are given endorsements accordingly by the Government. The number of industrial disputes reported in the district were 12 in 1966, 20 in 1967 and 33 in 1968.

Trade Unions

The Indian Trade Unions Act recognises the right of workers to organise themselves into trade unions for collective bargaining. These trade unions, after registration, have certain rights and obligations, and are independent bodies. There were five* registered trade unions functioning in the district of Raichur during the year 1968-69, the details of which are given below :—

Sl. No.	*Name and address of the Union*	*Membership*
(1)	Hutti Gold Mines Kamgar Sangh, Hutti ..	1,783
(2)	Hutti Gold Mines Employees' Association, Hutti ..	1,231
(3)	Tungabhadra Steel Products Employees' Union, Munirabad.	263
(4)	Raichur District Co-operative Central Bank Employees' Union, Raichur.	38
(5)	The Municipal Employees' Union, Gangavati ..	63

According to the figures furnished by the office of the Labour Commissioner, Bangalore, the total number of members of these trade unions was 3,378 in April 1969. Labour is well organised in the major industries like the Hutti Gold Mines. The agricultural labourers are not, however, organised.

Labour welfare amenities

Greater attention is being paid to the health conditions of the workers and sanitation in their colonies by the managements of the large-scale industries. Maternity benefits, provident fund benefits, workmen's compensation, holidays with pay, leave benefits and such other statutory measures have been introduced in these industries. Other benefits like housing facilities, provision of reading rooms and libraries, games and other recreational facilities have also been provided by the bigger factories in the district (*See* also Chapter V).

The workers employed in small and seasonal factories like oil mills, rice mills, ginning and pressing factories, etc., do not have

*There was also a Factory Owners' Union at Raichur, with a membership of 24, functioning on trade union lines.

these facilities and their salaries are also lower. Their standard of living is low. The managements of these establishments have not done much in the direction of ameliorating the working and living conditions of their workers.

The Government is implementing several welfare schemes. The Government's initiative in respect of providing banking facilities, starting of co-operative societies, screening of film shows to educate the working class and workers' education schemes have met with encouraging results. A labour welfare centre was started in Raichur town during the Third Five-Year Plan period. It is equipped with facilities for various indoor games and children's toys and also has a radio set. A reading room and a small library are attached to this centre. A separate tailoring section has also been started at this centre for the benefit of women. There is an Industrial Training Institute at Raichur. It is offering linemen and wiremen's courses and also training in trades like welding and fitting.

Banking facilities.—This scheme was taken up during the period of the Second Five-Year Plan with the main object of providing relief to the workers who are indebted to money-lenders and to enable them to get loans at reasonable rates of interest. Co-operative Credit Societies are being organised and registered under the Co-operative Societies Act for the benefit of workers.

Film Shows.—The Department of Labour exhibits film shows in big industrial establishments. Films showing the improved methods of production adopted in different industrial undertakings, safety measures, and also on the training required in various trades are screened.

Workers' Education Scheme.—This scheme, sponsored by the Government of India, is being implemented under the guidance of local committees. This was taken up during the second Five-Year Plan period to educate the workers on the constructive methods of settling their disputes and the better ways of managing their unions. For this purpose, three Regional Workers Education Centres have been started at Bangalore, Mangalore and Hubli in the State. These centres conduct short-term courses for selected workers for a period of 13 weeks on subjects like five-year plans, economics of industries, economics of labour productivity, trade unions, collective bargaining, etc., including practical training in labour matters by means of role plays, visits to industrial concerns, trade union centres, etc. In addition to the three Regional Centres, sub-centres are also offering training on the same lines. Two such sub-centres have been opened at the Tungabhadra Dam and Hospet which serve the needs of the workers of the Raichur district also.

Code of Discipline

A Code of Discipline formulated with a view to maintaining and ensuring better discipline in industries, both in the public and private sectors, is adopted in big industries in the district. It has helped in settling many of the industrial disputes without referring them to the court or tribunal. The implementation of the Code of Discipline has, to a certain extent, removed friction between the employer and the employed. According to the Code, there must be a just recognition by employers and workers of the rights and responsibilities of either party and a proper and willing discharge of its obligations by both the parties towards each other. The Code contains details as to what the employers and the trade unions should do and should not do in bringing about better industrial relations.

Employees' Provident Fund Scheme

The Employees' Provident Fund Scheme was made applicable to a selected number of factories under an all-India scheme framed by the Central Government under the Employees' Provident Fund Act, 1952. In 1948, the Indian Labour Conference recommended the ushering in of a statutory provident fund scheme and, as a result, an Ordinance was promulgated by the President in 1951, which was later on replaced by the Employees' Provident Fund Act of 1952. The Central Government looks after the administration of the scheme through a Central Board of Trustees, but certain delegated powers are exercised by the States.

In respect of those factories which have a provident fund scheme of their own, the provisions of which are in conformity with or are more favourable than the provisions of the statutory scheme, the Employees' Provident Fund Act, 1952, provides for their exemption from the operation of the scheme. Every employee of a factory, to which the employees' provident fund scheme applies, is eligible for membership of the fund after completion of one year's continuous service or 240 days of actual work during a period of twelve months. Contributions at 6¼ per cent is deducted by the employers from the basic wage and dearness allowance of employees who get Rs. 1,000 per mensem or less. Contributions in respect of certain well established industries, which employ more than 50 workers, go up to 8 per cent. Under the amended scheme which is now in force, any employee who is not eligible to join the scheme, can also be enrolled as a member of the fund on the joint application of the employee and the employer, provided the employer agrees in writing to pay his own share of provident fund contributions and administrative charges on the total contribution in respect of such employees. The monthly collections along with 0.37 per cent as administrative charges on the total wages of the employees are deposited by the employer in the nearest branch of the State Bank of India for being credited to the employees' provident fund account by the 15th of the following month. The expenses of administration

and supervision of the fund are met from the administrative and inspection charges.

A Provident Fund Commissioner has been appointed for the entire State of Mysore with his headquarters at Banglaore and he is assisted in this work by Regional Inspectorates, one of which is located in Raichur town. Factories which have completed five years of existence and possess an employment strength of twenty or more are covered under this scheme. Establishments having an employment strength of 50 persons or more and three years of existence are also covered. Industrial establishments having less than twenty employees and more than fifteen are called marginal establishments and there is no statutory compulsion involved in their cases. They are free to have their own benefit schemes.

The industries in the district of Raichur to which the statutory provident fund scheme is applicable are listed below :—

Sl. No.	*Name of Establishment*	*Date of applica-bility*	*No. of subscribers*	*Total provi-dent fund contribution*
1	2	3	4	5
1.	Ajoomal Lelaram Oil Mills, Raichur.	31-7-1956	10	180
2.	Faruk Anwar & Co., Raichur ..	31-7-1956	99	2,000
3.	Harikant Oil Mills and Ginning Factory, Raichur.	31-7-1966	3	65
4.	Salar Jung Sugar Mills Ltd., Munirabad	31-7-1956	679	19,000
5.	Koppal Oil and Refineries Ltd., Koppal.	31-7-1956	2	25
6.	Pedala Oil Mills, Raichur	31-7-1956	6	85
7.	Hutti Gold Mines Co., Ltd., Hutti ..	1-12-1957	2,538	51,600
8	Indian Hume Pipe Co., Ltd., Raichur Branch.	1-1-1960	24	400
9.	Guldas Thimmaiah Oil Mills, Industrial Area, Raichur.	1-12-1960	4	12
10.	Veerabhadrappa Balloli Oil Mills, Raichur.	1-12-1960	5	55
11.	Rathi Oil Mills, Raichur ..	1-12-1960	3	25
12.	Chandrakantha Talkies, Raichur ..	1-8-1961	7	70
13.	Hanuman Talkies, Raichur ..	31-7-1961	13	50
14.	Shashi Mahal Talkies, Mangalwarpet, Raichur.	1-9-1962	13	110
15.	Pratap Singh Vasanthdal & Co., Ganj, Raichur.	30-4-1962	16	550
16.	Siddheshwara Oil Mills, Koppal ..	1-5-1962	1	10
17.	Surajmal Sajjanraj Mehta Oil Mills, Koppal.	1-5-1965	3	40
18.	Mysore Fertilizers Co., Koppal ..	1-2-1966	7	160

1	2	3	4	5
19.	The Raichur District Co-operative Central Bank Ltd., Raichur.	31-1-1966	111	2,500
20.	City Talkies, Mandipet, Raichur ..	1-12-1965	12	70
21.	Mechanical Sub-Division under No. 5, Canal Division, Yermaras.	1-3-1964	..	..
22.	Chamundi Chemicals & Fertilisers Ltd., Munirabad.	1-12-1966	147	(In default)
23.	Bellam Thinamaiah & Bros' Oil Mills, Ganj Road, Raichur.	1-2-1967	6	40
24.	Raichur Agricultural Produce Co-operative Marketing Society Ltd., Rajendraganj, Raichur.	1-7-1967	32	800

In addition to the above, the following establishments have been recently included under the provident fund scheme :—

1. M/s. Tungabhadra Pulp and Board Mills Ltd., Munirabad.
2. The Gangavati Taluk Agricultural Produce Co-operative Marketing Society Ltd., Gangavati.
3. Mysore State Road Transport Corporation, Raichur.
4. Shambulingappa Pampanna Javali Ginning, Oil and Rice Mills, Karatgi, Raichur.

Remand Home

A Remand Home, established under the provisions of the Children's Act, is functioning at Raichur since August 1960. Destitute and delinquent children, who are remanded by the First Class Magistrates' Courts, are given protection in this Remand Home for a period of three months. (Juvenile cases are, at present, tried by all the First Class Magistrates' Courts of the district). During the period of the stay of these children in the Remand Home, they are looked after by the Superintendent who is also the Probation Officer of the district. The inmates are engaged in literacy classes during the day time. They are also made to attend to small pieces of work in the garden. In the evening, they participate in indoor and outdoor games like carom, foot-ball, etc. They are given good food, a set of clothes and beddings. The health of these children is carefully looked after. A Medical Officer pays frequent visits to the Remand Home and gives timely medical treatment to the affected children. The Central Government gives grants to meet a part of the expenditure, the total expenditure for 1968-69 being Rs. 41,455.

Reception Centre

A Reception Centre is functioning at Raichur since 1962. It was started under the Social and Moral Hygiene and After-care Programme taken up by the State during the Second Five-Year Plan period. Destitute women, unmarried mothers, deserted wives

uncared-for women, etc., remanded by any of the First Class Magistrates' Courts in the district are given protection at this Centre. Women and children who are rescued under the Suppression of Immoral Traffic in Women and Girls Act, 1956, are also admitted to this Centre. The Centre aims at providing training and after-care facilities in order to see that these unfortunate women and children are rehabilitated properly in life. They are looked after by the Lady Superintendent of the Centre, who is responsible to the Chief Inspector of Certified Schools. There is a managing committee constituted under the provisions of the Act to advise the Department on all matters relating to reception, classification, treatment and training, discharge and employment of the inmates. It is headed by the Deputy Commissioner of the district with the Deputy Superintendent of Police, District Surgeon and three to four non-officials as members. It meets once in three months to review the work of the Centre and chalk out future programmes. The Superintendent carries out the decisions of the Committee.

This Reception Centre can accommodate 30 to 35 women and girls. They are given good food and clothing and beddings. A literacy class and an adult education class are being run at this Centre for the benefit of the inmates. Provision for vocational training in embroidery, knitting, spinning, tailoring, etc., has also been made. There are five Ambar Charakas and a few tailoring machines. A lady Medical Officer pays regular visits to the Centre. There are also facilities for indoor games. The Centre is attached to the Probation and After-care Services Wing of the Social Welfare Department. A part of the expenditure is met by the Central Government by way of grants. The total expenditure for the year 1968-69 was Rs. 24,319. The Centre earned a sum of Rs. 130 as the sale proceeds of the articles manufactured by the inmates in 1968-69.

Rehabilitation Project

A scheme for rehabilitating repatriates from Burma and Ceylon, as sponsored by the Government of India, is being implemented in this district. In order to rehabilitate 900 agriculturist and 90 non-agriculturist families of migrants from Burma and Ceylon and with the added purpose of accelerating the development of lands under the Tungabhadra Project command area, especially the region under the distributary No. 54 of the Left Bank Canal of the project, an extent of 5,020 acres of land was selected at a distance of eight kilometres from Sindhanur in Raichur district. These repatriates will be settled in this area in four or five composite villages according to the accepted policy for rehabilitation of repatriates and migrants throughout India. Each such composite village will be provided with amenities like a school building, a community hall, a drinking water well, internal roads, approach roads and a dispensary. The total cost of the scheme, estimated at Rs. 73.04 lakhs, is met entirely by the

Government of India. The Commissioner for Land Reforms and *ex-officio* Secretary to the Government of Mysore, Revenue Department, Bangalore, is in charge of the Rehabilitation Project at the State level. The Divisional Commissioner, Gulbarga, is in charge of overall supervision, while the Deputy Commissioner, Raichur, exercises immediate supervision over the work of implementation of the project. The day-to-day affairs of the project are attended to by another officer designated as Administrator, who is assisted by the necessary staff.

Rehabilitation Reclamation Organisation

The Government of India maintains a "Rehabilitation Reclamation Organisation" at Sindhanur for purposes of reclaiming the lands acquired under the rehabilitation scheme. Out of the total area of 5,020 acres of land, 2,833 acres and five guntas have been already taken over. In order to reclaim this area, one fully-mechanised unit of 16 bulldozers is working since November 1968 and an area of 1,417 acres was levelled by the end of June 1969. The construction of work-sheds for the use of the unit has been completed and that of staff quarters is in progress.

The first batch of 63 families of repatriates arrived at the rehabilitation site towards the end of February 1969. Of these, 47 families are from Burma and the rest from Ceylon. In the beginning, they were asked to live in tents and later they were enabled to construct their own huts. Each family is allotted an area of five acres of cultivable and irrigable land in addition to the site for dwelling purposes. In order to help them to cultivate the area allotted to them, they have been organised under eight group-farms of various sizes depending upon their co-operation and adjustability with one another. An amount of Rs. 1,49,425 was sanctioned to them for purchase of bullocks, fodder, seeds and fertilisers, agricultural implements and construction of huts. The settlers are given liberal grants and loans. A single-teacher primary school has been opened in the colony. A Consumers' Co-operative Stores has also been started in order to supply foodgrains and other necessities to the settlers. The Medical Officer of the Primary Health Centre, Jawalgera, visits the colony once a week and provides medical aid to the settlers. The Assistant Veterinary and Animal Husbandry Officer, Sindhanur, also frequently visits and provides medical aid to the cattle maintained by the settlers. Arrangements to dig wells and to excavate tanks to store canal water have been made and work of sinking two wells and constructing two tanks have been completed.

Advancement of Backward Classes

According to the 1961 census, there were 1,14,079 people belonging to the Scheduled Castes, while the number of persons belonging to the Scheduled Tribes was almost negligible. Their taluk-wise distribution has been given in Chapter III. People

belonging to the backward classes are engaged in occupations like agriculture, unskilled labour, production of leather goods, cattle-rearing, rural crafts and menial services. Most of them are landless. A separate Department of Social Welfare has been set up in the State with a view to paying special attention to improve their educational, social and economic conditions. The social welfare work in the district is attended to by a Social Welfare Officer who is assisted by Social Welfare Inspectors at taluk level, who work under the Block Development Officers of the respective Community Development Blocks. The Social Welfare Officer works directly under the Deputy Commissioner of the district. He reports to the Deputy Commissioner and the Director of Social Welfare on the functioning of the institutions maintained or assisted by the Department and about the progress of work of implementation of the various schemes taken up by the Department. A brief account of the various facilities provided in the district is given in the following paragraphs.

Educational facilities

In order to help the students, both boys and girls, belonging to backward classes, the Social Welfare Department is maintaining hostels. By the end of the Second Five-Year Plan, four Scheduled Castes boys' hostels at Raichur, Manvi, Lingsugur and Kuknur and two girls' hostels at Raichur and Gangavati were functioning. The number of these hostels was increased to 13, as detailed below, by the end of the Third Five-Year Plan.

Sl. No.	Name of Hostel	Location	Student strength
1.	Scheduled Castes Hostel for Boys	Raichur	133
2.	Do do	Manvi	45
3.	Do do	Sindhanur	33
4.	Do do	Gangavati	33
5.	Do do	Kushtagi	47
6.	Do do	Kuknur	40
7.	Do do	Lingsugur	52
8.	Do do	Deodurg	48
9.	Scheduled Castes Hostel for Girls	Raichur	33
10.	Do do	Gangavati	20
11.	Denotified Tribes Hostel for Boys	Arkera	25
12.	Do do	Mudgal	58
13.	Hostel for Technical students	Raichur	50

In addition to these hostels, there are also two aided hostels functioning at Gangavati and Koppal. It was proposed to give grants-in-aid to four new hostels. A few students who wished to live in general hostels were proposed to be given grants for meeting their boarding charges.

Merit Scholarships

Poor and deserving students of Scheduled Castes studying in primary, middle and high schools are being given scholarships at varying rates. During the years between 1964-65 and 1968-69, a sum of Rs. 2,22,409 was distributed among 6,636 students of primary schools, 3,704 students of middle schools and 2,119 students of high schools. During the year 1968-69, a sum of Rs. 13,775 was provided for the grant of scholarships to students of denotified tribes. In addition to the award of scholarships, slates, text books, clothes, etc., are also being distributed free.

Residential Schools

A scheme for establishing Residential Schools was taken up during the Third Five-Year Plan period as a follow-up of the Nursery School Programme. The children who pass out of the nursery schools are admitted into Residential Schools where they are given free boarding and lodging and also free education. Three such schools are functioning in the district at Raichur, Ashihal in Lingsugur taluk and Naoili in Gangavati taluk for the benefit of denotified tribes.

Women's Welfare Centres

By the end of the Second Five-Year Plan period, there were six women's welfare centres besides Bapuji Seva Mandir, Raichur. They were situated one each at Raichur, Koppal, Sindhanur, Kushtagi, Gangavati and Manvi. During the Third Five-Year Plan, four more centres, one each at Raichur, Lingsugur, Deodurg and Yelburga were started. A nusery school is attached to each of these centres where children between the age-group of 3 and 5 years are provided with free mid-day meals and clothings. Various programmes for women are also conducted. Crafts like tailoring and embroidery, etc., are taught. The women welfare organiser, who is in charge of these institutions, pays visits to the houses of people belonging to Scheduled Castes and Tribes during which she makes individual contacts with the women and guides them on matters of cleanliness, hygiene, cooking, family income and budgeting, etc. All the national festivals are celebrated and their importance is explained to the members.

In some of the places like Raichur, where a large number of people belonging to the Scheduled Castes are living, the strength of children in nursery schools is 100, while in all other centres this number is limited to 50.

Provision has also been made for the grant of tour expenses for high school students on the basis of merit and good conduct, award of grants to a few deserving students studying in the aided college at Raichur and financial assistance to a student desirous of undertaking post-graduate studies, etc.

Economic uplift

For the welfare of women, various programmes have been taken up. Two tailoring centres, one at Raichur and another at Koppal, have been functioning in the district. Twelve women

belonging to the Scheduled Castes are being given training at each of these centres every year. On the completion of the annual tailoring examination, each successful candidate is given a sewing machine free of cost.

It has also been proposed to supply poultry and sheep at subsidised rates for the development of poultry farming and sheep-breeding, besides supply of bullocks, seeds, manure, etc., to the Scheduled Castes for agricultural development.

Housing facilities

During 1956-57 and 1957-58, 460 houses were constructed for the occupation of Scheduled Castes and house-sites to an extent of 23 acres were acquired. In 1967-68, a sum of Rs. 17,715 and in 1968-69 another sum of Rs. 5,416 were sanctioned for purpose of acquiring an area of 16 acres and 27 guntas and a grant at the rate of Rs. 700 for each house was made for the construction of eight houses. Under a Centrally-sponsored schemes, a sum of Rs. 16,000 in 1966-67, Rs. 6,600 in 1967-68 and Rs. 10,400 in 1968-69 were allotted for construction of 28 houses for the sweepers and scavengers of the Raichur Town Municipality.

Community Centres

The contribution of Community Centres towards the promotion of fellow-feeling among different sections of the community has been encouraging. Community Centres are functioning in almost all the taluk headquarters and other important places of the district. During the Third Five-Year Plan period, a sum of Rs. 61,050 was spent for the construction of Community Centre buildings in the district.

A sum of Rs. 73,827 was allotted to the district, under the State sector, to carry out the several programmes for advancement of the Scheduled Castes in the district, of which a sum of Rs. 71,223 was spent in the year 1967-68 as per details given below :—

Scheme	*Allotment*	*Expenditure*	*Physical targets achieved*
	Rs.	Rs.	
Education—			
Residential Schools ..	7,623	6,523	25 Children
Girls' Hostels ..	7,021	5,897	17 Boarders
Technical Boys' Hostel ..	3,318	2,948	25 do
Merit Scholarships ..	5,250	5,250	87 Students
Pre-matric Scholarships ..	10,000	10,000	242 do
Health, Housing and other Schemes—			
Acquisition of lands for house sites.	17,715	17,715	11.20 Acres
Drinking water wells ..	12,400	12,400	5 wells
Publicity and propaganda ..	10,500	10,500	2 Panchayats
Total ..	73,827	71,233	

A sum of Rs. 51,603 was allotted to the district, under the State sector, to implement various programmes taken up by the State for the welfare of the Denotified Tribes in the district, of which a sum of Rs. 50,314 was spent during the year 1967-68 as per details given below :—

Scheme		*Allotment*	*Expenditure*	*Physical targets achieved*
		Rs.	Rs.	
Education—				
Residential Schools	..	7,112	6,523	25 Children
Starting of Hostels	..	2,891	2,891	1 Hostel
Pre-matric scholarships	..	15,000	14,300	394 Students
Economic uplift—				
Aid to agriculturists	..	5,000	5,000	10 Families
Dairy and poultry	..	2,000	2,000	4 do
Aid to craftsmen	..	2,100	2,100	21 Persons
Health, Housing and other Schemes—				
Housing	..	16,000	16,000	22 Houses
Drinking water wells	..	1,500	1,500	1 Well
Total	..	51,603	50,314	

During the year 1968-69, a sum of Rs. 20,000 was sanctioned to the Dairy Co-operative Society for Denotified Tribes at the Singnodi Tanda in Raichur taluk.

A sum of Rs. 18,250 was sanctioned as grant-in-aid to seven hostels managed by private agencies for the benefit of backward classes in 1967-68. A list of important backward class hostels in the district is given below :—

Sl. No.	*Name of hostel and location*	*Student strength*
1.	Government Backward Class Hostel for Boys, Raichur ..	25
2.	Government Backward Class Hostel for Boys, Yelburga ..	33
3.	Vidyarthi Prasad Nilaya, Koppal	34
4.	Karnataka Kurubara Boarding Home, Koppal	31
5.	Sarvajanika Vidyarthi Vasathigriha, Kushtagi	16
6.	R.S.V.N. Hostel, Kanakgiri	4
7.	Sarvodaya Kalidasa Boarding, Lingsugur	19

During the same year, another sum of Rs. 14,850 was spent for award of scholarships to pre-matric students of the backward classes.

Social disabilities

The social disability arising out of the practice of untouchability has engaged the attention of the Social Welfare Department and propaganda measures have been adopted for eradicating the practice of untouchability. A scheme for the award of prizes to institutions or local bodies for doing outstanding work for the removal of untouchability is in operation. During the year 1967-68, the Village Panchayat of Kuknur, in Yelburga taluk, won the second prize at the State-level for the good work done in removing untouchability.

In addition to these various ameliorative measures, some other activities such as provision of employment to the unemployed and distribution of milk powder to the needy and poor children have also been taken up. A Dairy Co-operative Society at Sangapur in Gangavati taluk was started during 1966-67 at an expenditure of Rs. 18,000.

Charitable Endowments

The Endowments Department in the Raichur district traces its history from the old Ecclesiastical Department of the erstwhile Hyderabad State. The Ecclesiastical Department was abolished in 1950 in accordance with the new secular character of the State and in its place a new department called the Endowments Department was created under the Board of Revenue, with a Director of Endowments. The duties and functions of the Endowments Department are laid down in the existing endowment rules which are in force in the three districts of Gulbarga, Raichur and Bidar now integrated in the new State of Mysore. The Religious and Charitable Endowments Department at the State level is headed by a Commissioner. The endowments work in the district of Raichur is done by the Deputy Commissioner who has an assistant for this work. The Deputy Commissioner is also designated as the Director of Endowments for the district.

It is estimated that there are about seven thousand religious and charitable institutions in the district, consisting of temples, *mathas* and *dharmashalas*, the majority of them being situated in the rural areas. Of them, 5,305 institutions have been registered with the Department so far. These institutions and their properties are registered by the Endowments Department under the rules and regulations in force, in order to safeguard the properties from being encroached upon or alienated. There are two categories of institutions, one being looked after by the *Mutawallis* (Trustees) and the other being supervised direct by Government through appointed committees. Committees are constituted to manage major institutions. The following institutions are under

the direct control of the State Endowments Department and are managed through Committees nominated by Government :—

Raichur taluk

1. Nagareshwar temple, Raichur.
2. Kariappa Tata Samadhi, Kalmala village.
3. Sugureshwar temple, Devarsugur village.
4. Pancha Mukha Hanuman temple, Gandhal village.

Manvi taluk

1. Venkatesh temple, Gorkal village.
2. Jagannathaswami temple, Manvi.
3. Hanuman temple, Madlapur.

Sindhanur taluk

1. Ishwar temple, Dhadesugur village.
2. Amba Math, Somalapur village.
3. Rama Mandir at Sindhanur.
4. Hanuman temple, Balganur.

Gangavati taluk

1. Venkatesh temple, Karatgi.
2. Pampapathi temple, Hire-Jantkal.
3. Virakth Math, Kanakgiri.
4. Kanakachalapathi temple, Kanakgiri.
5. Ranganathaswami and Sri Jayalakshmi temple, Anegundi.
6. Bhogapuresh temple, Naoli.

Koppal taluk

1. Huligemma temple, Hulgi.
2. Hanuman temple at Mudabali village.
3. Veer Hanuman temple, Munirabad.
4. Venkatesh temple, Kavaloor village.
5. Hanuman temple, Hiresindogi village.
6. Basaveshwar Dev, Virupaksh Dev and Mahendar temple. temple.
7. Hanuman temple, Chukankal village.

Yelburga taluk

1. Gudneppa Matha, Kuknur.
2. Kalleshwar temple, Kallur.
3. Devasthan at Sanganhal.
4. Hanuman temple, Chick-Vankalkunta

Kushtagi taluk

1. Hanuman temple, Kandkoor.
2. Sukamuniswamy Temple, Dotihal.
3. Someshwar temple, Pura.

Lingsugur taluk

1. Amareshwar temple, Devarbhupur village.
2. Kuppeswami temple, Lingsugur.

Deodurg taluk

1. Ranganathaswami temple, Mundargi.
2. Ranganathaswami temple, Jalhalli.
3. Shivaraya temple, Mundargi.
4. Prabhu-Devar temple at Gugal village.

The work of the Endowments Department in Raichur district is concerned with the administration of the religious and charitable institutions except the Wakfs. According to the provisions of the Hyderabad Endowment Rules, which are in force in the district, budget estimates for the income and expenditure in respect of all the endowments which are deriving an annual income of Rs. 50 and above have to be prepared, well in advance, on the basis of the actuals of the previous years and sanction of the competent authority obtained. If the income of an endowed institution exceeds a sum of Rs. 1,000, the approval of the Commissioner for Endowments has to be obtained for the budget. The Deputy Commissioner of the district is empowered to sanction the budgets upto Rs. 1,000. Under the Hyderabad Endowment Rules, the officers inspecting these religious institutions have to check whether daily services and *sevas* are properly conducted, whether the institution is kept neat and tidy, etc. The accounts of the major institutions are audited by the State Accounts Department. The accounts of the endowments are also checked by the Deputy Commissioner and the Assistant Commissioners and the Tahsildars at the time of their inspections. The Endowments Department also supervises the sanitary and other arrangements during the time of the annual *jatras* and festivals, in so far as the institutions under the control of the Government are concerned and also makes arrangements to provide drinking water and shelter to the pilgrims who congregate for the *jatras* and festivals.

Financial position

The main source of income of the Endowments Department is the collection of *Haq-e-Intazam* (*i.e.*, supervision charges) from these institutions. It is assessed on the total income of the institutions after deducting land revenue, local fund cess, etc. The institutions get their income from endowed properties, conditional grants, etc. The total demand during 1961-62 was Rs. 23,863-98 (including arrears), of which a sum of Rs. 11,678 was collected

during the year. The total demand during 1968-69 had increased to Rs. 27,520-40. The talukwise break-up of this demand is given below :—

Sl. No.	*Name of taluk*			*Demand*
				Rs.
1.	Kushtagi	..	..	1,574—00
2.	Deodurg	..	..	975—00
3.	Koppal	..	..	5,225—00
4.	Raichur	..	..	4,192—40
5.	Yelburga	..	..	6,449—00
6.	Gangavati	..	..	2,281—00
7.	Sindhanur	..	..	3,272—00
8.	Manvi	..	..	2,895—00
9.	Lingsugur	..	..	657—00
		Total	..	27,520—40

The compensation amounts received by religious institutions for inam lands taken over from them were invested in various Government securities. Upto the end of 1962-63, a sum of Rs. 2,10,242-91 was so invested in Government securities.

Jewels

Registers showing the details of jewels belonging to each institution are being maintained in all the taluk offices. It is incumbent on the part of the Inspecting Officers of the Department to verify the temple jewels with reference to the entries in these registers and bring the discrepancies, if any, to the notice of the higher authorities for taking necessary action. Sometimes, new jewels either offered by the devotees or got made by the Department out of the offerings of the devotees are added to the stock of jewels. In 1961-62, a silver *vahana* weighing about 1,500 tolas was got prepared out of the silver offerings from the devotees for use in Sri Huligemma temple of Munirabad.

Wakfs

Formerly, Muslim Endowments in the district were under the administrative supervision of the Government. In 1955, the supervision and management of these endowments were transferred to the Wakf Board appointed under the provisions of the Central Wakf Act, 1955. With the merger of the three Hyderabad-Karnatak districts in the new Mysore State, a regional Wakf Committee with its headquarters at Gulbarga was constituted to supervise the work of the Muslim Endowments in the three districts and this arrangement was continued till 1963. Thereafter, District Wakf Committees were constituted for each district by the Mysore

State Wakfs Board, Bangalore, to supervise the administration of the Muslim Endowments. Consequent on the enforcement of the Central Wakfs Act, 1964, in the whole of new Mysore State, the Commissioner for Endowments was appointed as the Commissioner of Wakfs under Section 4(1) of the said Act for the purpose of conducting a survey of Wakf properties existing in the State. The survey work in respect of Raichur district has been completed. According to the figures furnished by the Assistant Commissioner of Wakfs, there were, in June 1969, 488 Wakfs in the district, having endowed properties worth about Rs. 56,13,850. The total annual income of the Wakfs in the distrcit was stated to be Rs. 2,78,302.

CHAPTER XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

SOON after the police action in 1948, normal conditions were restored in the Hyderabad State by the Military Governor with the assistance of a team of Civil Administrators and co-operation of the general public. The provision of relief to the thousands of persons, who had been affected badly in the disturbances, engaged the earnest attention of the administration. Realising that it was a human problem, which called for the co-operation of one and all, the administration sought the assistance of non-officials and the latter extended unstinted co-operation and assistance. In Raichur district, as elsewhere in the State, peace committees were formed at several places, which helped in the restoration of normal conditions in the district. Pensions were granted to 57 persons who had lost their bread-earners, and free gifts of cloth, cooking utensils, zinc sheets, timber, etc., were made to a number of other affected persons. A Refugee Fund, sponsored by the Military Governor, evoked a good response in the district and a sum of Rs. 1.40 lakhs was collected towards it.

Though the feudal regime of the Hyderabad State was terminated in 1948 and later a full-fledged popular Government took over the reins of the administration in 1952, still the problems of the people of Raichur and other districts of Hyderabad-Karnatak region did not find a solution. There could be no satisfaction for them until the area was integrated with the other Kannada-speaking areas. So they directed their efforts towards the formation of a United Karnataka led by the State Congress and other political parties. Under the auspices of the Ryot Parishat of the Hyderabad-Karnatak also, a demand for the division of the Hyderabad State on a linguistic basis was strongly urged by the people of the area. The Karnataka Parishat, a cultural organisation of Kannadigas of the Hyderabad State, also played a prominent role in this regard. As a result of the untiring efforts of the leaders and the people of the area, three predominantly Kannada-speaking districts of Raichur, Gulbarga and Bidar were integrated in the new Mysore State which came into being on November 1, 1956, as a result of the States' reorganisation.

Since Raichur became a part of the new Mysore State, the general political situation in the district has been harmonious and peaceful. Communal harmony and peace are well maintained. There has been perceptible political and social consciousness among the people in general. With the establishment of the popular Government, people have had opportunities to see and know more of the Government and its plans and programmes and to criticise more freely and boldly than ever before. They not only co-operate with the Government in their developmental efforts, but also lend their hand in building schools, hospitals, roads and the like. For instance, the Merchants' Association of Raichur is said to be extending financial assistance for running a few educational institutions in the Raichur town. Similarly, in the community development blocks of the district, people are reported to have made substantial voluntary contributions, both in cash and by way of labour, for the execution of some of the development programmes. Besides, during the Chinese and Pakistani aggressions on our country in 1962 and 1965 respectively, the people of the district contributed considerable amounts to the National Defence Fund. As at the end of July 1969, the total money contributions of the people of the district towards the fund stood at Rs. 20,83,303 besides contributions in kind which included 6,159 grams of gold and 275.8 grams of silver. Then again, under the Bhoodan Yajna movement sponsored by Acharya Vinoba Bhave, some people of the district have donated lands to a total extent of 647-27 acres for distribution among the landless.

The quinquennial general elections to the Parliament and the State Legislature are very keenly contested by the various political parties and individuals. With the decentralisation of administration brought about by the enactment of the Mysore Village Panchayats and Local Boards Act, 1959, a large number of people vie with one another to get elected to the Taluk Development Boards and the Village Panchayats. Similarly, the elections to the municipal councils are also keenly contested, so also elections to the co-operative institutions and all other elective posts.

Political parties

During the second general elections held in 1957 (*i.e.*, the first general elections after the formation of the new Mysore State), the only well-organised political party in the district was the Indian National Congress. This party which had a strong hold on the electorate in the district, contested all the Parliamentary and Assembly seats in the district and emerged victorious in all of them. The Praja-Socialist Party, which contested a solitary seat, could not make a mark, so also the independents. The latter included also candidates put up by the Lok Sevak Sangh, a local party. However, in the third general elections held in 1962, the Congress Party met with a serious opposition from the Lok Sevak Sangh, which fielded candidates

in all the Parliamentary and Assembly Constituencies in the district. The Swatantra Party also came on the scene and set up its candidates in two of the Assembly constituencies; but it met with failure in both the constituencies. But the Lok Sevak Sangh wrenched from the Indian National Congress one of the two Lok Sabha seats and three of the ten Assembly seats. Even in the fourth general elections held in 1967, the Congress Party could not regain its lost position, but it was able to maintain the *status quo* without conceding any more seats to the opposition parties.

Besides Indian National Congress, the other political parties which fielded their candidates in the fourth general elections were the Swatantra Party, the Samyukta Socialist Party and the Bharatiya Jan Sangh. There were also several independent candidates. While the Congress Party retained its one Lok Sabha seat and seven Assembly seats, the Swatantra Party won the other Lok Sabha seat and also an Assembly seat. The Samyukta Socialist Party, which contested a lone Assembly seat, came out successful in it. The remaining one Assembly seat was won by an independent candidate. The Bharatiya Jan Sangh failed to win the solitary seat for which it put up its candidate. A brief account of the last three general elections, together with particulars of constituencies, the number of contesting candidates, the number of votes polled by each of them, etc., is given in the following paragraphs.

General Elections, 1957

In pursuance of sub-section (2) of Section 17 of the States' Re-organisation Act, 1956, read with Section 6 of the Scheduled Castes and Scheduled Tribes Order (Amendment) Act, 1956, and the rules and orders made thereunder, the Delimitation Commission issued a final order in December 1956, fixing the territorial constituencies of the district for purposes of the second general elections. By virtue of that order, Raichur district was allotted two seats in the Lok Sabha and ten seats in the Mysore Legislative Assembly. The ten seats to be filled up were distributed in nine Assembly constituencies including one double-member constituency. For purposes of election to the Lok Sabha, Raichur and Koppal were chosen as the two constituencies to elect two members. Except Raichur, all the rest—eight in number—were single-member constituencies relating to the Assembly schedule. In the Raichur double-member constituency, one seat was reserved for the Scheduled Castes.

The following table indicates the extent of each constituency and the number of seats allotted to each :—

Sl. No.	Name of constituency	Extent of constituency	Total seats	Seats reserved for	
				Scheduled Castes	Scheduled Tribes
	1	2	3	4	5
		Lok Sabha			
1.	Raichur ..	Raichur, Manvi, Lingsugur and Deodurg taluks of Raichur district; Shorapur and Shahapur taluks and Yadgir circle in the Yadgir taluk of Gulbarga district.	1	..	..
2.	Koppal ..	Koppal, Yelburga, Kushtagi, Sindhanur and Gangavati taluks of Raichur district; Hadagalli taluk, Mallapuram sub-taluk, Sirguppa taluk and Hospet taluk (excluding Kamalapuram firka and the villages in Kampli firka) of Bellary district.	1	..	..
		State Legislative Assembly			
1.	Raichur ..	Raichur taluk and Kurdi circle in Manvi taluk	2	1	..
2.	Deodurg ..	Deodurg taluk and Jalihalli circle in Lingsugur taluk	1	..	..
3.	Manvi ..	Manvi taluk (excluding Kurdi circle) and Gurgunta circle in Lingsugur taluk.	1	..	..
4.	Lingsugur ..	Lingsugur taluk (excluding Gurgunta and Jalihalli circles).	1	..	..
5.	Sindhanur ..	Sindhanur taluk and Karatgi circle in Gangavati taluk.	1	..	..
6.	Kushtagi ..	Kushtagi taluk ..	1	..	..
7.	Yelburga ..	Yelburga taluk ..	1	..	..
8.	Koppal ..	Koppal taluk (excluding Erkalgad circle and such of the villages in Hittanhal circle as specified.)	1	..	..
9	Gangavati ..	Gangavati taluk (excluding Karatgi circle and Erkalgad circle and such of the villages in Hittanhal circle as specified.)	1	..	..

The following statement indicates the number of electors in each constituency, the percentage of electors who voted, the number of contesting candidates and the votes polled by each of them in the second general elections in the district :—

Sl. No.	*Name of constituency*	*No. of electors*	*Percentage of electors who voted*	*No. and party affiliation of contesting candidates*	*No. of valid votes polled by each candidate*	*Successful party*
1	2	3	4	5	6	7
				Lok Sabha		
1.	Raichur ..	4,05,678	37.01	1. Congress ..	84,089	Congress
				2. Independent	66,059	
2.	Koppal ..	4,08,966	55.9	1. Congress ..	1,30,849	Congress
				2. Independent	98,093	
				Legislative Assembly		
1.	Raichur (double-member)	97,258	52.0	1. Congress .. (S.C.)	15,044	Congress
				2. Congress ..	13,744	Congress
				3. Independent	8,254	
				4. Independent	7,583	
				5. Independent (S.C.)	6,797	
2.	Deodurg ..	52,836	31.0	1. Congress ..	9,595	Congress
				2. Independent	6,940	
3.	Manvi ..	54,337	35.0	1. Congress ..	9,023	Congress
				2. Independent	4,964	
				3. Independent	2,839	
				4. Independent	2,343	
4.	Lingsugur ..	43,503	44.32	1. Congress ..	12,672	Congress
				2. Independent	5,151	
				3. Independent	1,502	
5.	Sindhanur	55,399	45.26	1 Congress ..	11,752	Congress
				2. Independent	8,129	
				3. Independent	3,503	
				4. Independent	1,049	
6.	Kushtagi ..	54,753	48.11	1. Congress ..	18,226	Congress
				2. Independent	7,840	
7.	Yelburga ..	56,328	62.20	1. Congress ..	20,548	Congress
				2. Independent	14,500	

1	2	3	4	5	6	7
8.	Koppal ..	39,242	53.03	1. Congress ..	10,222	Congress
				2. Independent .	7,161	
				3. Independent	2,783	
				4. P.S.P. ..	878	
9.	Gangavati	48,964	43.93	1. Congress ..	12,862	Congress
				2. Independent	5,243	
				3. Independent	1,980	
				4. Independent	1,245	

It could be seen from the above statement that the Indian National Congress had set up two candidates to the two Lok Sabha seats who were opposed by two independents supported by the Lok Sevak Sangh. Similarly, the Congress party had fielded its candidates in all the Assembly constituencies, who were also opposed by several independents besides a lone candidate from the Praja-Socialist Party. Without any exception, the Congress candidates came out successful in all the constituencies and not a single independent candidate could win a seat in any of the constituencies.

General Elections, 1962

For the third general elections held in 1962, the previous double-member Assembly constituency of Raichur was abolished under the provisions of the Two-Member Constituencies (Abolition) Act, 1961, and in its place two separate single-member constituencies of Raichur and Kalmala were created. The latter constituency was reserved for the Scheduled Castes. Under the Delimitation of Parliamentary and Assembly Constituencies Order, 1961, the district was divided into two Parliamentary and ten Assembly constituencies as shown below :—

Sl. No.	*Name of constituency*	*Extent of constituency*
1	2	3
	Parliamentary Constituencies (Extent in terms of Assembly Constituencies)	
1.	Raichur ..	Yadgir, Shahapur and Shorapur in Gulbarga district and Raichur, Kalmala, Deodurg, Manvi and Lingsugur in Raichur district.
2.	Koppal ..	Sindhanur, Kushtagi, Yelburga, Koppal and Gangavati in Raichur district and Hadagalli, Hospet and Sirguppa in Bellary district.

1	2		3
			Assembly Constituencies
1.	Raichur	..	Raichur and Yergera circles in Raichur taluk.
2.	Kalmala (S.C.)	..	Raichur taluk (excluding Raichur and Yergera circles) and Kurdi circle in Manvi taluk.
3.	Deodurg	..	Deodurg taluk.
4.	Manvi	..	Manvi taluk (excluding Kurdi circle) and Gurgunta circle in Lingsugur taluk.
5.	Lingsugur	..	Lingsugur taluk (excluding Gurgunta circle).
6.	Sindhanur	..	Sindhanur taluk and Karatgi circle in Gangavati taluk.
7.	Kushtagi	..	Kushtagi taluk.
8.	Yelburga	..	Yelburga taluk.
9.	Koppal	..	Koppal taluk (excluding Erkalgad circle and 19 villages in Hittanhal circle as specified).
10.	Gangavati	..	Gangavati taluk (excluding Karatgi circle), Erkalgad circle and 19 villages in Hittanhal circle as specified.

The sub-joined statement shows the number of electors, the number of persons voted, the number and party affiliations of the contesting candidates and other relevant particulars in respect of the third general elections in the district :—

Name of constituency	*No. of electors*	*No. of electors who voted and percentage*	*No. and party affiliations of contesting candidates*	*No. of valid votes polled by each candidate*	*Successful party*
1	2	3	4	5	6
			Lok Sabha		
1. Raichur ..	4,36,535	1,87,070 (42 85)	1. Congress .. 2. Lok Sevak Sangh.	95,424 80,099	Congress
2. Koppal ..	4,59,762	2,61,846 (56.95)	1. Lok Sevak Sangh. 2. Congress ..	1,25,018 1,20,737	Lok Sevak Sangh

1	2	3	4	5	6
		Legislative Assembly			
1. Raichur ..	55,958	19,279 (34.45)	1. Congress .. 2 Lok Sevak Sangh.	9,699 8,317	Congress
2. Kalmala (S.C.)	50,584	11,561 (22.85)	1. Congress .. 2. Lok Sevak Sangh. 3. Independent	7,396 3,035 390	Congress
3. Deodurg ..	56,309	24,488 (43.49)	1. Congress .. 2. Lok Sevak Sangh.	16,143 6,583	Congress
4. Manvi ..	56,729	24,190 (42.66)	1. Congress .. 2. Swatantra .. 3. Lok Sevak Sangh.	15,139 3,856 2,918	Congress
5. Lingsugur ..	48,044	25,491 (53.06)	1. Lok Sevak Sangh. 2. Congress .. 3. Swatantra ..	13,289 7,551 2,741	Lok Sevak Sangh.
6. Sindhanur	62,651	32,057 (51.17)	1. Congress .. 2. Lok Sevak Sangh.	15,073 14,212	Congress
7. Kushtagi ..	57,425	31,924 (55.59)	1. Lok Sevak Sangh. 2. Congress. ..	15,233 14,194	Lok Sevak Sangh.
8. Yelburga ..	63,708	32,938 (51.70)	1. Lok Sevak Sangh. 2. Congress ..	16,104 14,310	Lok Sevak Sangh.
9. Koppal ..	44,452	23,196 (52.18)	1. Congress .. 2. Lok Sevak Sangh.	10,701 10,355	Congress
10. Gangavati	58,337	24,156 (41.40)	1. Congress .. 2. Lok Sevak Sangh.	15,823 6,027	Congress

An interesting feature of the third general elections in the district was the lesser number of contestants in the field as compared to the second general elections. While there were 30 contestants for the Assembly seats in the 1957 elections, there were only 23 in the 1962 elections. There were straight contests

in most of the constituencies, the predominant contesting parties being the Indian National Congress and the Lok Sevak Sangh. This was mainly due to the electoral alliance forged between the Lok Sevak Sangh and the independent candidates in their bid to oppose the Congress.

General Elections, 1967

The Delimitation of Parliamentary and Assembly Constituencies Order, 1966, did not much vary the extents of the two Parliamentary constituencies in the district for purposes of the fourth general elections held in 1967. The only change effected was that the Sirguppa Assembly Constituency in Bellary district, which was included in the Koppal Parliamentary Constituency for purposes of the third general elections, was replaced by the Mundargi Assembly Constituency from Dharwar district. Some changes were, however, made in the extents of some of the Assembly constituencies as could be seen from the following statement:—

Sl. No.	*Name of constituency*	*Extent of constituency*
1.	Deodurg	Deodurg taluk.
2.	Raichur	Gillesugur circle, Yergera circle (excluding Garaldinni and Dinni villages), Raichur circle (excluding Askihal, Rampur, Eklashpur and Kurabdoddi villages), Kuknur, Manslapur, Athbenchi, Hasapur and Jalibenchi villages in Kalmala circle and Palkamdoddi village in Chandarbanda circle in Raichur taluk.
3.	Kalmala (S.C.)	Devarsugur circle, Chandarbanda circle (excluding Palkamdoddi village), Kalmala circle (excluding Kuknur, Manslapur, Arlibenchi, Hasapur and Jalibenchi villages), Askihal, Rampur, Eklashpur and Kurabdoddi villages, in Raichur circle, Garaldinni and Dinni villages in Yergera circle (all in Raichur taluk), Kurdi circle and 20 specified villages in Sirvar and Kallur circles, and the villages of Doddal, Kataiki and Mudlapur in Manvi circle (all in Manvi taluk).
4.	Manvi	Manvi taluk (excluding Kurdi circle and 20 specified villages in Sirvar and Kallur circles and the villages of Doddal, Kataiki and Mudlapur in Manvi circle) and Maski circle in Lingsugur taluk.
5.	Lingsugur	Lingsugur taluk (excluding Maski circle).
6.	Sindhanur	Sindhanur taluk.
7.	Kushtagi	Kushtagi taluk.
8.	Yelburga	Yelburga taluk.
9.	Gangavati	Gangavati taluk and 12 specified villages in Hittanhal circle of Koppal taluk.
10.	Koppal	Koppal taluk (excluding 12 specified villages in Hittanhal circle).

As in the general elections of 1962, the Kalmala Assembly Constituency continued to be a reserved constituency for the Scheduled Castes in the 1967 general elections also. The statement given below shows the results of the fourth general elections in the district at a glance :—

Sl. No.	*Name of constituency*	*No. of electors*	*No. of electors who voted and percentage*	*No. and party affiliations of contesting candidates*	*No. and percentage of valid votes polled by each candidate*	*Successful party*
1	2	3	4	5	6	7
			Lok Sabha			
1.	**Raichur** ..	4,95,088	2,35,984 (47.67)	1. Swatantra ..	1,17,272 (52.56)	Swatantra
				2. Congress ..	1,05,833 (47.44)	
2.	**Koppal** ..	5,19,702	3,27,016 (62.92)	1. Congress ..	1,66,690 (53.98)	Congress
				2. Independent	1,42,088 (46.22)	
			Legislative Assembly			
1.	**Deodurg** ..	61,678	32,492 (52.68)	1. Swatantra ..	19,074 (63 73)	Swatantra
				2. Congress ..	10,857 (36.27)	
2.	**Raichur** ..	65,308	24,710 (37.84)	1. Samyukta Socialist party.	14,637 (63.24)	Samyukta Socialist Party
				2. Congress ..	5,463 (23.60)	
				3. Bharatiya Jan Sangh.	2,034 (8.79)	
				4. Independent	736 (3.18)	
				5. Independent	275 (1.19)	
3.	**Kalmala (S.C.)** ..	52,482	10,506 (20.02)	1. Congress ..	6,001 (61.28)	Congress
				2. Independent	2,690 (27.47)	
				3. Independent	1,102 (11.25)	

popular for its style, humour and trenchant criticisms. After it ceased publication in 1921, *Kannadiga*, another Kannada weekly, published from Bagalkot, became popular in the district. The Karnataka Sangha of Raichur, which was established in 1928, took up the agency of this journal and was selling about 200 copies of the same in the district, the price per copy being three pies. In 1933, it was merged with *Samyukta-Karnataka*, then started as a weekly from Belgaum and soon converted into a daily, a few copies of which were also being received in the district. The first correspondent of a Kannada newspaper in the district was R. G. Joshi. He was first appointed as a correspondent for *Kannadiga* in 1922-23 and for *Samyukta-Karnataka* in 1933-34.

The first Kannada newspaper that was published in Raichur district and for that matter, in the entire Hyderabad-Karnatak region, was *Dakkan Prabhat*. The first issue of this weekly was released on November 9, 1940, its editor being P. Rachotaiah. It is said that efforts were made to convert the newspaper into a daily, but without success. After serving the needs of the Kannadigas of the region for about four to five years, the paper ceased publication owing to financial and other difficulties. The next paper to be started in the district was *Nagarika*, another Kannada weekly edited by S. Hanumanta Rao. It was first started at Gulbarga and later shifted to Raichur. This weekly also did not survive for long Another Kannada weekly called *Seva* was started by Kalinganath Hiremath after the police action. It also survived only for about four to five years. J. K. Praneshacharya, a veteran Congress leader, started another Kannada weekly called *Sadhana* to voice the grievances of the Kannadigas of Hyderabad-Karnatak. This paper, which was being published from Hyderabad, was shifted to Raichur after the States' re-organisation. Though a popular weekly of a fairly good standard, it also could not survive for long and ceased publication after a few years.

Another Kannada weekly, *Lokavani*, was being published from Koppal by Sri Nandalike for a few years. It was subsequently shifted to Raichur and became defunct after some time. *Sevaka* was yet another Kannada weekly published from Raichur by P. Rachotaiah and Kotrabasaiah. It is also defunct now. Two more weeklies, *viz.*, *Tungbhadra* and *Sandesh*, were being published in the district for some time and were also later closed down. The only weekly that is now being published from Raichur is *Samaja Vikas*, which was started only recently by Sri Shamarao Deshpande.

The Karnataka Sangha, Raichur, was publishing a Kannada monthly called *Vijaya* during the fifties of this century. The monthly, which was started sometime during 1953-54, ceased publication after five to six years. Another Kannada monthly,

Amaravani, started publication from Yadgir in Gulbarga district in January 1949 and was later shifted to Raichur in December 1954, its editor being *Vidwan* B. M. Veereshwara Shastri. It is the only journal which has survived for over two decades in the area and which is still in existence. The editor has his own press for printing the journal. A quarterly literary magazine called *Prateeka* is being published from Raichur since October 1969 by a Board of Editors under the auspices of Prateeka Prakashana, Raichur, the main object of the magazine being the encouragement of local literary talent. All the existing periodicals in the district have only a small circulation.

Papers from outside the district

Though the field for journalistic enterprise has not been yet congenial in the district, some of the newspapers published outside the district seem to have a good circulation. Among the Kannada daily papers which come from outside, the *Samyukta-Karnataka* of Hubli, the *Prajavani* and *Kannada Prabha* of Bangalore have become more popular. Weekly and monthly journals like *Karmaveera*, *Sudha*, *Prajamata*, *Kasturi*, *Mallige* and *Mayura* have a good appeal among the Kannada-reading public in the district. With the gradual rise in the literacy percentage, the number of readers of the Kannada newspapers and periodicals has also increased in recent years. English dailies like the *Times of India* and *Free Press Journal* of Bombay, the *Hindu* of Madras, the *Deccan Herald* of Bangalore, the *Indian Express* of Bombay and Bangalore are popular among the readers of English newspapers in the district. The *Andhra Prabha*, a Telugu daily, has some circulation among the Telugu-reading population. The film periodicals published in Bombay and Madras are becoming more and more popular among the younger generation.

Urdu newspapers from Hyderabad were coming to Raichur in large numbers a few years back; but now their number has considerably decreased. After the reorganisation of the States, the news-reading public of the district look to papers from Bangalore, the capital of the State. However, among the Muslim population of the district, a few of the Urdu newspapers like *Rehanuma-e-Deccan* and *Siyasat*, published in Hyderabad, are still popular. Among the other Urdu newspapers, which have a fair circulation in the district, are the *Inquilab* of Bombay and the *Salar* of Bangalore. *Nasheman* of Bangalore is popular among the Urdu weeklies.

The papers published outside the district and which circulate in the towns and villages of the district have their own distributing agents. Most of the daily newspapers reach their readers in Raichur by the same afternoon and several among them have their own correspondents at Raichur.

VOLUNTARY SOCIAL SERVICE ORGANISATIONS

Organised social activities form a particular feature of the non-official endeavour in the district, and there are several voluntary organisations doing good work in catering for the social needs of the people in a variety of ways. However, it may be said that their number is not large when compared with the size of the district, which is the third largest in the State. These organisations not only complement and supplement governmental efforts in several fields but also cover some fields of ameliorative service which Government agencies alone cannot fulfil. Many of these social service organisations have won official recognition, assistance and general guidance. Several public-spirited pioneers took up the task of organising social service bodies, by starting programmes to uplift the less fortunate groups in the social fabric of the district. Medical aid, educational facilities, Harijan welfare and women's and children's welfare have been among the subjects to which earnest attention is being paid by these organisations.

The following are some of the important social service institutions in the district whose activities are given in a nutshell. It has not been possible to obtain details from each and every institution. However, attempts have been made to include as many institutions as possible, about whose activities particulars could be collected.

Mahila Samaja, Raichur

The Mahila Samaja, Raichur, a women's welfare institution, was started by a band of public-spirited workers in February 1954 and registered in October 1955. There are about 60 members on the rolls of the Samaja, paying a nominal fee of Re. one to Rs. three per annum. The main objects of this institution are to guard the social interests of women and to look after the welfare of children. One among the important social service organisations in the district, this Samaja is also running a Shishu Vihar as an adjunct. In the beginning, the Shishu Vihar had only three children, but now the number has exceeded a hundred. This children's section is manned by three teachers and one maid servant. Two cycle-rickshaws are maintained by the Shishu Vihar to bring the children from their homes to the institution. A small grant-in-aid from Government is received by the Vihar. Contributions to the Mahila Samaja and the Shishu Vihar are also received from the Central Social Welfare Board, the local Merchants' Association and Government. A tailoring class has also been opened for the benefit of the members of the Mahila Samaja.

Since 1962-63, the Samaja has undertaken a scheme of conducting condensed courses for the benefit of women desirous of taking up the seventh standard and S.S.L.C. examinations.

It is a scheme sponsored by the Central Social Welfare Board aimed at helping widows, deserted wives and destitutes above 20 years of age to earn their livelihood. Twenty-five women are admitted to each of these courses, and the third batch of women was attending these courses in 1969. A small children's library has also been established recently. The CARE organisation has donated milk powder for distribution among the children of the Vihar. For the orderly management of the institution, a fifteen-member working committee, including a president, a vice-president and a secretary has been constituted.

Sharada Mahila Mandal, Hanamsagar

The Sharada Mahila Mandal, Hanamsagar, in Kushtagi taluk, was established in July 1963 with the main object of promoting the welfare of women and children of the area. There are about 50 members in the Mandal and is managed by a committee consisting of a president, a vice-president, a treasurer, a secretary, an assistant secretary and three other members. Arrangements have been made for teaching tailoring, embroidery, clay modelling, making of flowers and other designs out of coloured papers, etc., to interested women in the Mandal. A *Balawadi* has been started as an adjunct to the Mandal, with effect from 1st December 1968, under the charge of a lady teacher. Educational toys and other equipment have been purchased recently for the use of children attending the *Balawadi.*

Bhagini Samaj, Yelburga

The Bhagini Samaj, Yelburga, was established in March 1964 with the help of contributions from the generous public of the area with the object of achieving the welfare of the women of the area, especially in the social, cultural and economic spheres. There is a managing committee of seven members to look after the affairs of the Samaj, which meets about once a month. Handicrafts like tailoring, knitting, embroidery, etc., are taught to women so as to enable them to supplement their family incomes. About 30 women were attending these classes during 1969.

By July 1969, about 80 women had completed their training in these handicrafts, of whom nearly 30 were provided with sewing machines at half the cost with the help of the local Taluk Development Board. Earlier, the Board had also given a financial assistance of about Rs. 4,200 to the Samaj for purchasing sewing machines and other equipment required for running the handicraft classes. The institution is getting an annual grant from the Government and also the local bodies. Proposals are under way to start a *Balawadi* as an adjunct to the Samaj.

Mahila Mandal, Rajoor

The Mahila Mandal, Rajoor, in Yelburga taluk, was started in February 1967 with the main object of promoting the economic betterment of the women of the area. At present, there are

about 20 regular members in the Mandal. A managing committee, consisting of five members, looks after the affairs of the Mandal. The funds required for running the institution are raised from the Taluk Development Board of the taluk and subscriptions from the members.

Tailoring and a few other handicrafts are taught to interested women for which there is a lady instructor. Two sewing machines and other equipment are provided by the Samaj for the benefit of the trainees. The first batch of ten trainees has already passed out of the institution and the second batch is now undergoing training.

Kasturba Anathashram, Mancherla

The Kasturba Anathashram is an orphanage for the welfare of Harijan pupils and is located at Mancherla, nine miles from Raichur town. Though a small orphanage, providing accommodation to about 20 inmates, the institution is rendering good service to the under-privileged members of the community. Free food and education is provided to all the inmates. Mostly, orphan children are admitted into the Ashram for whom every possible assistance is given in order to make them fit and useful for discharging their future obligations to the society. Discipline and character-building form an integral part of the education imparted in the Ashram.

Kasturba Kendra, Gunjahalli

The Kasturba Kendra, Gunjahalli, in Raichur taluk, is a children's welfare institution, located about thirteen miles away from Raichur town. The main objects of the Kendra are to cater for the social, economic and educational needs of children belonging especially to the poor class. The poor and the under-nourished children have a safe abode in this Kendra where particular attention is paid to their health. A dispensary is also attached to the Kendra and is doing useful work.

Kasturba Maternity Centre, Gunjahalli

The Kasturba Maternity Centre, Gunjahalli, in Raichur taluk, was opened in January 1955 under the direct patronage of the Kasturba Gandhi National Memorial Trust. The object of this welfare institution is to provide free maternity and medical aid to the people of Gunjahalli and the surrounding villages. A large number of out-patients are treated in the centre every year. In addition, antenatal, post-natal and delivery cases are also attended to. The midwife attached to the centre also attends to private calls, at the request of expectant mothers. The Maternity Centre is directly under the supervision of the provincial representative of the Memorial Trust. An auxiliary committee is formed to guide and help the workers of the institution. The centre receives a grant from the Central Social Welfare Board and also from the Raichur Taluk Development Board.

Harijan Sevak Sangha, Raichur

The Harijan Sevak Sangha, Raichur, was established during 1949-50. It is affiliated to the All-India Harijan Sevak Sangha, New Delhi. The Sangha has set up a few branches in the district to ameliorate the lot of the Scheduled Castes. Under the auspices of the Sangha, volunteers go round the villages to inculcate a spirit of self-help and self-respect in the minds of this backward community. Lectures are given to wean away Harijans from the habit of drinking and to instil in them habits of cleanliness and personal hygiene. With the assistance and co-operation of the State Social Welfare Department, the members of the Harijan Sevak Sangha undertake various kinds of ameliorative work in the fields of education, housing, agriculture, etc.

Ramakanya Pathashala, Raichur

The Ramakanya Pathashala, Raichur, was started in 1945. The objects of the Pathashala are to help remove illiteracy among the poor, to spread Hindi, to teach domestic science to girls, to help poor widows and destitute women and to prevent juvenile delinquency. These objectives are sought to be achieved with the help of honorary workers. Free education is imparted both in Hindi and Sanskrit. Handicrafts are taught both to the children and adults. As a result of a carefully prepared scheme of training, many destitute women have been able to become earning members. Poor girls, who cannot manage to pay for their education, have also been benefited by the Pathashala. It has also a small library of its own. The Pathashala receives some grants from the Central Social Welfare Board, the State Government and the Raichur Taluk Development Board. Among the handicrafts taught in the Pathashala are tailoring, knitting, embroidery, paper-work, carpet-making, tape-making, etc. The institution is looked after by a managing committee.

Sarvajanika Vidyarthi Vasati Gruha, Kushtagi

The Sarvajanika Vidyarthi Vasati Gruha, Kushtagi, was started in January 1943 by the generous public of the place with the object of providing free educational facilities to orphans and other economically handicapped youths of promise. It provides hostel facilities to students who come from far off villages for study in the taluk headquarters. There is an elected managing committee for the institution. This institution, which was registered in the year 1958, is run by donations raised during the harvest season from the producers and traders of the area either in cash or in kind. The institution is receiving a grant from the State Government. There are at present about 50 inmates in the hostel who are obliged to do *shramadan* in addition to their studies. The local Municipality has granted an acre of land, free of cost, for the institution. The Gruha is non-communal in character and admission is made strictly on grounds of poverty. So far, more than 150 students from this hostel have passed their S.S.L.C. public examination.

Gavisiddheshwara Vidyavardhaka Trust, Koppal

The Gavisiddheshwara Vidyavardhaka Trust, Koppal, is being run under the auspices of the Sri Gavisiddheshwara Matha at Koppal. The Matha, said to have been established as early as 1008, is one of the oldest in the State. The present Swamiji of the Matha is the sole trustee of the Vidyavardhaka Trust, the main objective of which is the promotion and spread of education. A college, two high schools and two primary schools are being run by the Trust, of which one high school is at Kuknur and the rest are all in Koppal. A students' free boarding home is also run by the Trust within the premises of the Matha, wherein about 100 to 150 poor students are provided with free boarding and lodging facilities. In addition to the subjects taught in the respective educational institutions, the students residing in the boarding home are also taught Sanskrit.

New Education Society, Raichur

The New Education Society, Raichur, is of recent origin, having been established in 1968. It is a registered organisation, the aims and objects of which are the promotion of education, science and literature by establishing educational institutions from the nursery to the college level. Starting of libraries, reading rooms and students' hostels is also among its objectives. However, the Society has so far been able to start only a middle school called Naya Madarasa.

Bharat Sevak Samaj, Raichur

The Raichur unit of the Bharat Sevak Samaj was started in the year 1952. This all-India social service organisation has, as its main objective, the service of the nation, irrespective of caste, creed or political beliefs. Between 1953 and 1958, the branch in the district took up the work of organising student labour and setting up social service camps. Each year, about eight to ten such camps were organised—separately for boys, girls, teachers, etc. These camps, organised in co-operation with the local community development blocks, aimed at inculcating the spirit of social service and dignity of labour in the minds of young men and women of the district. During these camps, construction of approach roads, wells, field channels, community halls, soak pits, compost pits, etc., were undertaken in addition to village-cleaning. An important item of work done during these camps was the excavation of about 20 miles of field channels to lead water from the Tungabhadra Left Bank Canal, to irrigate about 5,000 acres of land. The programme of conducting such camps was discontinued after 1962. Thereafter, the Samaj switched over its activities to the organisation of family planning camps, Lok Karya Kshetras and the like. The latter programme was also discontinued since 1968.

A cutting and tailoring centre for women was started by the Samaj at Raichur in 1961-62. The centre has been getting a grant from the State Government since the last three years. A Shishu Vihar, in memory of the late Pandit Jawaharlal Nehru,

was also established by the Samaj at Raichur in 1964. The Raichur unit of the Bharat Sevak Samaj is under the charge of a District Chairman assisted by a Secretary.

Bharat Scouts and Guides, Raichur

Scouting is a voluntary movement which is international in character. It aims at the physical, mental and social development of boys and girls through systematic training. Hence, with a view to rejuvenating the movement in the educational institutions of the district, two Assistant State Organising Commissioners, one for boy scouts and another for girl guides, have been posted to Raichur from September 1968, with jurisdiction over the districts of both Raichur and Bellary. Since then, 20 units of boy scouts consisting of 640 members and 10 units of girl guides with 320 members have been organised in the several educational institutions of the district and more and more units are expected to be organised in the coming years.

With a view to encouraging this movement, 25 per cent of the sports fees collections in the educational institutions has been permitted to be utilised for scouting activities under an order of the State Government. There is a District Scouts Association in Raichur with the Deputy Commissioner of the district as its president, the District Commissioner (Scouts) as the convener and the District Educational Officer or the District Physical Education Inspector as the secretary. There are about 110 members in the Association, consisting of both officials and non-officials. A Scouts and Guides Bhavan, costing approximately Rs. 25,000, is being constructed by the Association at the district headquarters. A contingent of the District Scouts and Guides participated in the Fifth All-India Jamboree held at Kalyan in West Bengal in December 1967. Another contingent is being trained for participation in the Sixth All-India Jamboree proposed to be held in Bombay sometime during 1970. The Assistant Organising Commissioners for boy scouts and girl guides work under the control of the State Organising Commissioner and the State Chief Commissioner at Bangalore.

Rotary Club, Raichur

The Rotary Club, Raichur, was started in June 1957 as a member of the Rotary International. It is essentially a service organisation covering four avenues of service, *viz.*, service to members, vocational service, community service and international service. In Raichur, the Club's activities are mainly directed towards rural services like help to poor boys studying in schools and opening of a night school in Raichur town for Harijan boys. In the night school, thirty students were receiving primary education, and this institution was maintained entirely by the Rotary Club. On national holidays like Republic Day and Independence Day, fruits are distributed by the members of the Club to the in-patients of the civil hospital. Clothes are also distributed among poor patients. The Club also organises a 'Mr. Raichur'

physique contest every year and awards prizes to the winners. It also awards a gold medal to the student who secures the first rank in the district in the annual S.S.L.C. examination. The Club has also organised a children's service and has established a children's park called Nehru Balavana.

The Club has a managing committee consisting of a president, a vice-president, a secretary, a joint secretary and three directors.

Lions Club, Raichur

The Lions Club, Raichur, was started on September 15, 1966, with the main object of rendering social service to the community in the fields of education, health and the like. During 1969, there were about 45 members on the rolls of the Club including its Board of Directors. Among the Board of Directors are a president, three vice-presidents, a secretary, a treasurer, a lion-tamer, a tail-twister and four directors. The activities of the Club are conducted by funds raised through subscriptions from members, donations and benefit performances.

Under the auspices of the Club, so far, about 2,000 children have been given triple antigen injections; besides, another 3,000 children have been immunised against polio by administering them with oral polio drops. The Club has also undertaken a programme of constructing bus-shelters, one in each year, on the Bangalore—Hyderabad National Highway. Elocution and essay competitions for students are conducted every year during the Independence Day and Republic Day celebrations respectively, and prizes are awarded to the winners. During the annual Dasara festivities, fruits and sweets are distributed among the in-patients in the local Civil Hospital and the inmates of the local Remand Home

Lions Club, Gangavati

The Lions Club of Gangavati is of recent origin and it was inaugurated on January 1, 1969, by Lion M. J. Vispy Engineer, Lions International Representative, Bombay. Fellowship and service are among the objectives of the Club, which has about 40 members on its rolls. The Club is managed by a Board of Directors consisting of thirteen members and its activities are financed from contributions from members and the general public.

In 1969, the Club organised a polio vaccine and triple antegin camp at Gangavati for the benefit of children, and about 300 children were covered under this programme every month. A kindergarten school was established in the town during the month of August of the same year. A notable service rendered by the Club during the year was the help rendered to the fire-victims at the Odderhatti and Sanapur camps. About 140 distressed families in the former camp were provided with cooking utensils, besides

making financial contributions to the funds of the relief committees set up for the purpose. It also conducted a free eye-operation camp of Dr. M. C. Modi in September 1969, at which 9,800 free meals were served to the eye-patients attending the camp, besides supplying free medicines to about 470 patients. In all, about 3,990 patients were examined and 234 were operated. The Club also organised a 'children's health day' during June 1969 and 176 children were medically examined on that day.

Raichur Junior Chamber

The Raichur Junior Chamber was established on December 11, 1966, with about fifteen members on its rolls. The number has now increased to about 30; one of its activities is the training of individual citizens for leadership. The activities of the Junior Chamber, which is affiliated to the National Chamber, are financed from subscriptions from its members and contributions from the public. In the month of November every year, the Chamber conducts a 'children's on-the-spot painting competition' with a view to developing the latent artistic talent in the children. About 20 prizes are awarded to the winners every year.

In pursuance of its objective of training the individual citizens for leadership, the Chamber organised a symposium on "You and your M.L.A." in August 1967. The legislators and prominent citizens of the district participated in the symposium. It also conducted a free eye-operation camp of Dr. M. C. Modi at Raichur during the month of October 1968, at an expenditure of about Rs. 17,000. In all, 4,760 eye-patients were examined on the occasion, of whom 771 patients were issued medicines free. Besides, about 6,480 free meals were provided to the patients attending the camp. Among the proposed future programmes of the Chamber is a plan for the establishment of a Leprosy Colony at Raichur with the help of the local City Municipality.

Kranthi Club, Raichur

The Kranthi Club, Raichur, is a premier sports club of Raichur district started in the year 1947. The main objects of the Club are to promote, among its members, interest in wholesome outdoor physical activities, to set up a high standard of sportsmanship among them and to improve their standards of efficiency in games and athletics. There are about a hundred members in the Club, mostly youths, who are interested in sports and games.

The Club provides for most of the major games, particularly kabaddi and volleyball. It has been a champion in these latter two games in the district Dasara festival sports. It has produced some leading sportsmen like Sri G. Timma Reddy, a national player in volleyball, besides some University players in kabaddi and volleyball. The Club conducted an All-India Volleyball Tournament at Raichur during 1967-68. It had a unique record

of presenting a ladies' team at the volleyball court of Raichur. The Club raises the funds required for its. activities through subscriptions from the members and contributions from the public.

Besides these some voluntary social service organisations, there are several other similar institutions in the district, mostly in urban areas, which strive for the social, cultural, educational and economic uplift of the various sections of the society in their own way. There are also organisations like the Rashtreeya Swayamsevak Sangh, the Arya Samaj, the Vishva Hindu Parishat, the Jamaat-e-Islami, the Tameer-e-Millat, etc., which seek to promote their respective social and cultural objectives. A number of Mahila Mandals, Yuvak Mandals, Farmers' Forums, Radio Rural Forums and the like have come up in recent years, especially in the rural areas, thus adding lustre and strength to the social fabric of the district.

CHAPTER XIX

PLACES OF INTEREST *

THE district of Raichur is rich in historical associations and cultural traditions. It has a considerable number of places which are of interest from the points of view of history, archaeology, religion, culture, modern development, etc. A brief account of some of the more important places of interest in the district is given in the following pages in an alphabetical order.

Anegundi

ANEGUNDI (P.** 2,323), in Gangavati taluk, meaning in Kannada 'elephant pit', said to have been the place where the elephants of the Vijayanagara kings were kept, is situated on the left bank of the river Tungabhadra, just opposite the ruined capital of the Vijayanagara empire. One of the most ancient places in the district, Anegundi has been identified with a part of Kishkindha, the kingdom of Vali and Sugreeva of the Ramayana. It has also been identified by some scholars with Kong-kien-na-pu-le of Hiuen Tsang. It had strong fortifications and had been the capital of a principality.

Both Hampi and Anegundi were destroyed by the confederacy of Muslim kings after the great battle of Rakshasa-Tangadgi in 1565. Tipu Sultan sacked the town of Anegundi in 1776. The following extract about Anegundi from the previous Mysore Gazetteer would be of interest: "According to the Mackenzie Mss., however, Tirumalaraya who succeeded, in 1756, Rama Rayaloo (identical with Kodanda Rama II or Rama Raja VI) was still ruling at Anegundi. As he is the person from whom the present Rajas of Anegundi trace their descent, he probably represented that section of the Aravidu dynasty that settled down at Anegundi after the battle of Raksasa-Tagdi. He is probably identical with Timmappa who was dispossessed by Tipu Sultan,

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* The portion relating to archaeological remains in the district in this Chapter and Chapter II is mainly based on the reports and notes of the Hyderabad Archaeological Department and on "Antiquarian Remains in Hyderabad State, 1953."

** P=Population; the figures are from the 1961 census.

when he overran the whole country in 1776 and burnt the town of Anegundi and its suburbs.'—Mysore Gazetteer, Vol. II, Part III, p. 2420 (edited by C. Hayavadana Rao, 1930).

Remains of some magnificent buildings of the Vijayanagara dynasty are still traceable and there are fine specimens of the contemporary work on the pillars of the Oncha Appa Matha and in the screens and sculpture of the Ganesha temple. The pillars are of jet black basalt and are deeply carved. The ceiling of the Oncha Appa Matha has also some paintings. (*See* Chapter II under Archaeology). The fortress of Anegundi was rebuilt in the 16th century. It has two walls and strong bastions. The Pampa Sarovara, Kamal Mahal and Nava-Brindavana which has *samadhis* of some saints, are nearby. The place has also old temples dedicated to Ranganatha and Jayalakshmi. Until 1949. Anegundi was a *samsthana* with a Raja Saheb.

Benkal

BENKAL (P. 1,275 including Hire and Chikka Benkals), in Gangavati taluk, is some six miles to the west of Gangavati. The hill situated to the south has groups of dolmens and chromlechs. There is also an ash-mound about two furlongs to the south. The mound in early times must have been the site of an iron-smelting factory. Close to the dolmens, there are prehistoric paintings at three places, exhibiting quite 'a developed taste and art'. (*See* also Chapter II under Prehistoric Period).

Bichal

BICHAL (P. 1,070), in Raichur taluk, is noted for the Matha of Sri Saviradevaru Channaveera Shivacharya Swami.

Deodurg

DEODURG (P. 8,560) is the headquarters town of the taluk of the same name and is about 34 miles west of Raichur. It was formerly a stronghold of Bedar chieftains and has an old fort. Nearby, there is a hill which contains talc.

Devarbhupur

DEVARBHUPUR (P.850), in Lingsugur taluk, about 11 miles from Lingsugur, is noted for its Amareshvara temple and jaggery trade. The temple is beautifully situated amidst hillocks which have green foliage. Under the auspices of this temple, annually a big *jatra* takes place in the month of Phalguna when a cattle fair is also held.

Devarsugur

DEVARSUGUR (P. 1,389), in Raichur taluk, situated on the right bank of the Krishna river, is noted for its Sugureshvara or Veerabhadra temple. The annual *jatra* of this temple, held in the month of Margashira, attracts a large number of people.

Gabbur

GABBUR (P. 3,714), in Deodurg taluk, has several old temples and inscriptions. In the old days, it was a centre of education and was also known as Gopuragrama. The most important of the temples are those of Male-Shankara, Venkateshvara, Ishvara,

Bangara Basappa and Hanuman. In addition to these, there are several ruined temples, two or three *mathas*, a few cisterns and a gateway called the Chandi-gate with a temple on either side of it. The Male-Shankara temple is built of rough grey stone and has a high plinth. The carving in the temple is plain on account of the roughness of the stone. There are two inscriptional tablets at the northern and western entrances and there is a large cistern in front of the temple.

The temple of Venkateshvara consists of three shrines, two of them containing the images of Vishnu and the third a *linga*. The carving on the outer walls of this temple, representing figures of various deities and animals, are elegent, the figures of elephants being particularly striking. On the eastern side of the temple, there is a large cistern, with beautifully carved masonry steps all round, called 'Sat baoli' or seven cisterns. One of the *mathas* here is called Ganni Gudi Matha. It has a beautifully carved door. There is a tank which was perhaps originally connected with the temple which is now in ruins. The Bangara Basappa temple has a shrine with an image of Ganesha, two *Nandis* (one is of a fairly large size and the other is a small one) and an inscriptional tablet. Gabbur has enclosure walls round it, which are of different periods and in different states of decay. The square form of their bastions is considered to be Muslim in design.

According to an inscription dated 1109 A.D., belonging to the reign of Vikramaditya VI of the Chalukyas of Kalyana, now placed in the Hyderabad Archaeological Museum but originally belonging to a Jaina temple at Gabbur, the place (then called Gobbur or Hiriya Gobbur) was an *agrahara* town in the 12th century A.D. The same record states that it had also a Jaina temple called Brahma-Jinalaya or Nagara-Jinalaya.

Gandhal

GANDHAL (P. 1,589), in Raichur taluk, which is situated about 20 miles south of Raichur, has a well-known temple of Panchamukhi Prana Devaru (Hanuman with five faces) on a hillock. Visitors to Mantralaya (now in Andhra Pradesh) make it a point to visit this temple also.

Gangavati

GANGAVATI (P. 19,026), headquarters town of the Gangavati taluk, is about nine miles to the north of Anegundi. It is said that formerly it was known as Neelavati. The Tungabhadra flows at a short distance of about two miles from here. Gangavati has been a centre of developmental activities under the Tungabhadra Project and has grown considerably in recent years. There is an Agricultural Research Station here. It is a commercial centre noted for trade in jaggery and grains. It has an old *matha* of Sri Muddusangaswami and a temple of Viroopaksha built by a Vijayanagara king.

Gurgunta

GURGUNTA (P. 4,401), in Lingsugur taluk, was the chief town of a small principality (*samsthana*) of Naiks related to the chiefs of Kanakgiri and Shorapur. In the old days, these chiefs owed allegiance to Vijayanagara kings or Adil Shahs of Bijapur. The Gurgunta *samsthana* had survived under the Nizams and was merged in the district in 1949.

Hutti

HUTTI (Camp and village—P. 6,529), in Lingsugur taluk, about 11 miles from Lingsugur, is well known for its gold mines (*See* Chapter V).

Itgi

ITGI (P. 2,673), in Yelburga taluk, is a fairly large village, about three miles to the south of Bannikoppa railway station on the Gadag-Koppal line. This place is famous for the Mahadeva temple, which is one of the finest of the later Chalukyan temples.

The temple, which faces east, consists of a shrine with an ante-chamber, a closed hall with porches on either side of it towards the north and the south, and a pillared hall which is open at the sides. The pillared hall was originally supported by 68 pillars. Of these, 26 are large ones, standing on the floor and forming the main support of the roof. The remaining, which are shorter, stand on the stone bench surrounding the hall and carry the sloping eaves. The large columns are of different designs, but are arranged symmetrically with regard to the shape and pattern of each. The four central ones, very rich in design, have angular carvings arranged vertically both in the shafts and capitals. The slabs in the central part of the ceiling have been carved into a rich arrangement of hanging arabasque foliage and *makaras* which spring from the jaws of a *kirtimukha* mask.

The inner hall, which is closed, has, beside the entrance from the outer hall, has also doorways towards the north and the south, which are richly adorned with sculpture. The top of the *shikhara* is now missing; but it was divided into three storeys which are quite distinct. The small niches, which decorate the centre of each storey rising one above the other, are exceedingly handsome. The three principal niches on the shrine walls, bold accentuated by their deep projecting cornices are now empty, their images having disappeared.

A beautiful inscription in mediaeval Kannada verse set up in a hall adjacent to the temple states that the temple was built in 1112 A.D. by Mahadeva, a General (*Dandanayaka*) of the Western Chalukya king Tribhuvanamalla Vikramaditya VI and praises the temple as 'Devalaya Chakravarti' (*i.e.*, Emperor among temples). This temple can be said to be one of the best in the country both in the magnificence of its architectural style and luxuriant decorative detail. (*See* also Chapter II under Archaeology).

JALADURGA (P. 104), in Lingsugur taluk, is an island fort situated picturesquely in the Krishna river, about eight miles from Lingsugur. It was an important fort of the Adil Shahs of Bijapur, and a fine description of it has been given by Meadows Taylor in his book, 'Noble Queen' (1874).

Jaladurga

JAWALGERA (P. 3,313), in Sindhanur taluk, is about 54 miles from Raichur. A Central State Farm has been started near this place, with an area of 7,569 acres (*See* Chapter IV, p. 202).

Jawalgera

KADLUR (P. 1,339), in Raichur taluk, is looked upon as a sacred place. To the north of this village, the Bhima joins the Krishna. According to an inscription found at Chikalparvi, the Vijayanagara king Krishnadevaraya visited this pilgrim centre with his family and offered worship.

Kadlur

KALLUR (P. 6,847), in Manvi taluk, is a large village, about 13 miles from Raichur on the road to Ginigera. The village is surrounded on all sides by granite hills except the east and derives its name from the abundance of the boulders on these hills. The village and the hills around are full of antiquities.

Kallur

The present village, which is a modern growth, is surrounded by an old wall which appears to be a work of the 13th or 14th century A.D. But the five gates appear to be of Muslim period. Two of them, which are not in much use, have no names. The other three are called after the towns to which they lead, Manvi Darwaza, Kalmala Darwaza and Raichur Darwaza. The gates are more or less in a ruined condition. The superstructure of the Raichur Darwaza, which has been pulled down to construct the *chavadi* in the village, contained a wooden inscription in Kannada. According to this inscription, which now forms part of the ceiling of the *chavadi* building, the gateway was constructed by Agha Khusru, a well-known Adil Shahi dignitary.

There are six temples in and around the village. Out of these, only the Markandeshvara temple deserves some notice. This seems to be the oldest temple in the village and its hall has some pillars of black polished stone with beautiful carvings on them. A number of inscriptions have been found in this village, most of them belonging to the period of the Chalukyas of Kalyana.

Another interesting feature of Kallur is that there are many large and well-built wells. Five of these wells are very spacious, which have been built of solid masonry and have flights of steps leading to their base. It is not known when and by whom they were constructed. The largest well is 50 feet by 50 feet on the surface and about 120 feet deep and contains sweet water. (*See* also Chapter II under Prehistoric Period).

Kalmala

KALMALA (P. 3,494), in Raichur taluk, about nine miles from Raichur, has the *samadhi* of a noted saint, Kariyappa Tata.

Kanakgiri

KANAKGIRI (P. 6,780), in Gangavati taluk, is an ancient place, situated on the Gangavati-Lingsugur road, about 13 miles from Gangavati. It is surrounded on three sides by two streams and was formerly the chief town of a principality* of Bedar Rajas, founded by Parasappa Naik during the days of the Vijayanagara rule. The Nizams had allowed some 16 villges of this principality to be retained by the surviving Naiks with their headquarters at Hulihaidar, a nearby village.

Kanakgiri means a 'hill of gold' and its old name was Swarnagiri with the same meaning. This place was probably the headquarters of the southern viceroyalty of the Mauryas. It is said that Kanaka Muni, a saint, performed penance at this place.

The place has several temples built by the Naiks of Kanakgiri, the chief among them being the Kanakachalapathi temple, which is a large one and is of considerable architectural charm; it is a fine specimen of South Indian architecture of the Vijayanagara times and has spacious halls and massive pillars. The *gopuras* and walls have well-executed sculpture. There are in this temple elegantly made statues of Rajas and Ranis in black polished stone and several large wooden statues and plaster models of mythological figures. On the outskirts of the town, there is a fine and well-designed royal bath constructed by Venkatappa Naik. According to a popular saying current in the area, "people with eyes must see Kanakgiri and those with legs, Hampi", which means that the Kanakgiri temples are a delightful feast for the eyes and that one must be prepared to go about tirelessly to see the sprawling ruined capital of Vijayanagara (Hampi). An annual *jatra* associated with the Kanakachalapathi temple, which is held in the month of Phalguna, is largely attended.

Kavital

KAVITAL (P. 5,420), in Manvi taluk, is a large village, situated on the Raichur-Lingsugur road, about 46 miles from Raichur and 18 miles from Lingsugur. There is a hillock to the south-west of the village which has several natural caverns. Along the slopes of the hill, artifacts, iron slag and pieces of ancient pottery were found. To the west of the village is an ash-mound on the top of which, in later times, a temple has been built. The ash-mound marks the site of an old smelting factory. There is an interesting mediaeval temple in the village, called Tryambakeshvara temple,

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* An account of this principality and of the monuments of this place is given by Sri Jaithirth Rajpurohit in "Kanakagiri", an article in the Souvenir of the Mysore Medical Conference, Raichur 1907.

which has three shrines, two of which contain *lingas*. There are two Kannada inscriptions in the temple and a beautiful image of Mahishasuramardini in one of the two niches in its western wall. All the three shrines are of a uniform size, each being 9 feet deep and 8 feet broad, and each one has an ante-chamber, also of a uniform size of 7 feet by 8 feet, connected with the main hall.

The exterior of the temple is plain, but the masonry work is very impressive. The *shikharas* of the shrines, which are of the Dravidian style, have been built upto about two-thirds of their height in dressed stone, while the remaining portion had been completed in brick and lime. The walls of the temple are built of huge blocks of pink granite, some of which are as big as 15 feet in length, 3 feet in breadth and about 2 feet in thickness. The plinth is covered with earth; but on the northern and western sides, some portion of it are exposed and these show a frieze representing elephant-fights and other scenes.

Kinhal

KINHAL (P. 5,460), in Koppal taluk, about eight miles from Koppal, is noted for manufacture of toys and images by Chitragars (*See* Chapter V). Weaving, preparing of combs from horns and pottery are the other industries of this place.

Koppal

KOPPAL (P. 19,530) is the headquarters of the taluk and the sub-division of the same name and is situated on the left bank of Hirehalla, a tributary of the Tungabhadra, and is on the Guntakal-Hubli railway line. It is an important commercial, industrial and educational centre in the district. It is also well known for hand-loom-weaving. Until 1949, it was the chief town of the *jagir* of Nawab Salar Jung, which consisted of the Koppal and Yelburga taluks. It has an old and noted Veerashaiva *matha*, which runs also two high schools, a free boarding home and an Arts and Science College. The place must have been very important in ancient times as can be seen from the numerous Sanskrit, Prakrit and Kannada inscriptions dating from the times of Ashoka onwards, found here.

Koppal is situated at the foot of a rock, the latter being crowned by a fort. There is another range of hills to the west, the highest spur of which is called Palkigundu, 2,339 ft. in height. There is another spur on the east, called Gavimatha, which is about 150 ft. above the surrounding land. There is a third spur to the south; its height above sea level is 1,980 ft. and is called Bahadur Bande. The fort rock is in the middle. The Gavimatha spur contains four caves and a modern temple, with Lingayat Gurus. There are also some Jaina *samadhis* opposite one of these caves. The hill commands a beautiful view.

To the west of Palkigundu, there is a hillock called the Mali Mallappa hill, on the top of which are a number of dolmens. Some

of these dolmens, which are locally called 'Moriyara-angadi' or Moriyas' shops, are intact, while others are disturbed. The fields between this hill and the Palkigundu hill are called 'Pandavara Vathara' or Pandavas' quarters. As dolmens are generally found at the foot of hills, their existence here on the top of the hill is rather unusual.

There have been found two Ashokan edicts, belonging to the 'Minor' series and agreeing with the northern version, on the Gavimatha and Palkigundu hills, one on each. The one on the Gavimatha hill is complete and legible, while that on the Palkigundu is so worn out that only a few letters are legible. The latter is believed to be identical with the former.

A number of Kannada inscriptions (ranging from the 9th to the 13th century A.D.) and Muslim records have also been found at this place. A Kannada inscription of the 9th century refers to it as a reputed *teertha*, which is confirmed by the famous Kannada work *Kavirajamarga* of the 9th century wherein it is called 'Vidita Maha Kopananagara', *i.e.*, the reputed great Kopananagara. Elsewhere it has also been called Adi-teertha and Mahateertha. Koppal was a famous centre of Jaina pilgrimage in those days. There are said to have been, during that period, 772 Jaina *basadis* and 24 Jaina *sanghas* at this place. Not less than 20 Jaina epigraphs have been discovered at this place.*

About the end of the 10th century, Koppal appears to have become the capital of a branch of the Silahara family. The Gangas of Talkad, who were Jainas, also seem to have contributed a great deal to enhance the reputation of this place as a Jaina centre. The Chalukyas of Kalyana also seem to have favoured this place, which is referred to in several of their inscriptions.

Fort

The fort is another important object of historical interest at Koppal. It is not known definitely by whom it was built. But it was acquired by Tipu Sultan in 1786 A.D. from a Paleyagar and rebuilt into one of the strongest forts with the help of French engineers. In May 1790, it was besieged by the forces of the British and the Nizam. Sir John Malcolm, who participated in this siege, has described it as 'without exception the strongest place'. It is said that the European artillery of the force, at the end of six months' siege, could make little impression upon the fort. Its capitulation was owing to the receipt of the news of the occupation of Bangalore by the English. During the first war of independence, in 1858, the fort had been besieged by Bhimarao Nadagouda. (*See* Chapter II under Freedom Struggle).

* Sri P. B. Desai: "Jainism in South India," pp. 338–367.

The fortifications consist of two forts. The upper fort is situated on a lofty and almost isolated summit in a gorge on the eastern side of a cluster of rocky hills which occupy an area of several square miles. The fort is about 400 feet above the plains. It is practically inaccessible except by a flight of very rude steps, which go on winding among the rocks, and are in some places extremely narrow and unsafe.

The annual Gavisiddheshwara *Jatra* held here about the month of January is the biggest in the taluk.

Korva (Kolan) (Naradagadde)

KORVA (KOLAN) (P. 331), in Raichur taluk, is a beautiful island surrounded by the Krishna river, about 18 miles north-east of Raichur. It is looked upon as a holy place and is popularly known as Naradagadde, where sage Narada is said to have performed penance. A fine road has been laid from Raichur to this place which has been also electrified.

It has a temple dedicated to Narada, a famous Veerashaiva *Matha,* the *samadhi* of Vairagya Channabasavaswami who lived about four centuries ago and was well-known for his mystic wisdom, a Shivayoga *Peetha* and a Basavanna temple. The annual *jatra* at this place attracts a large number of people and a cattle fair is also held at the time, when there is a brisk trade especially in blankets, brass vessels, bullocks and carts.

Just near Naradagadde, there is Koormagadde (Kurumakshetra or Kuravakala) which has a Dattatraya *Peetha* and the *samadhi* of Sripadavallabha Swami. It is said to be the original place of Dattatraya. It has a temple dedicated to him which is visited by devotees from far and near.

Kotekal

KOTEKAL (P. 538), in Manvi taluk, is situated on the Raichur-Lingsugur road, about 11 miles from Lingsugur. The village has two hillocks, each having a fort at its top. Along the slopes of these hillocks have been found artifacts, iron-slag and gold-crushers, belonging to the prehistoric period.

Kuknur

KUKNUR (P. 6,133), in Yelburga taluk, is a small town lying seven miles due north of Bannikoppa station on the Guntakal-Hubli railway line. The 'Sringera Tota' here is pointed out as the place where Chandrahasa of puranic fame met the daughter of Dushtabuddhi. The *Sthala-purana,* which is of doubtful value from the historical point of view, describes the place as Kuntalapura and connects it with Chandrahasa. The Kannada poet Lakshmeesha, in his Jaimini Bharata also, calls it Kuntalapura.

The town, though now small, was an important place in the early and mediaeval days and is rich in antiquarian remains of the later Chalukyan style of architecture and these buildings range

from the 8th to the 13th century A.D. and illustrate the building tendencies of the age. The group of temples that represents the early Chalukyan school is called the Navalinga group. Two other important temples are those of Kalleshvara and Mallikarjuna. The Kalleshvara temple is a fine example of the Chalukyan style and is in good condition. The original form of the Mallikarjuna temple, however, cannot be fully made out; the shrine and the *mantapa* also have been altered and built over in recent years. The Kalleshvara temple contains one Kannada inscription, while the other has three, one of them recording the date of construction of the temple in the 12th century A.D. But the most important temple from the religious point of view is that of Mahamaya; it is in the same enclosure in which the Navalinga temple is situated, a building of considerable dimensions but devoid of architectural merits. (*See* also Chapter II under Archaeology).

Agrahara

In the old days, Kuknur was the headquarters of a small region called Kuknur-30, which formed a part of Belvala-300 and was also one of the major *agrahara* towns in the region. According to a copper-plate grant dated 1183 A.D., the representative strength of the *agrahara* was 1,000 *Mahajanas*, who are described as "excellent Brahmanas endowed with sacred knowledge, virtuous character, scholarship, modesty and good action". In a later copper-plate grant dated 1253 A.D., the number of the *Mahajanas* is given as 1,002. That Kuknur enjoyed a pre-eminent position in the field of religion in the olden days is evident from the large number of temples found at the place. The long inscription dated 1178 A.D., beautifully composed in the form of a mediaeval Kannada poem of a highly classical order and handsomely engraved on a slab in the *mukhamantapa* of the Mahamaya temple, gives a number of details about the town and the temple. The place at that time had many temples, the most important of which was that of Jyeshtha, 'revered mother of the universe'. The inscription narrates the sovereignty of the goddess among the gods and states that its high priest was Rajaguru Siddhanti Kaleshvara*.

According to that inscription, which calls the place as Shiva-Shakti-sphurat-samputa-kshetra, *i.e.*, 'hallowed abode ever radiant with the presence of Shiva and Shakti', there were nine Swayambhu Shivalingas and an equal number of Shakti-peethas. The goddess Jyeshtha is now commonly called Mahamaya which name figures in the list of tantric deities. It thus appears that Kuknur was an important centre of the Shakta school during the 12th century A.D. (In a copper-plate record of the Vijayanagara

*This Kaleshvara is said to have belonged to the family of the priests of Nagareshvara of Sudi. The members of this family had earned the title 'Siddhanti' on account of their deep learning and they were 'Rajagurus', *i.e.*, family priests of the kings Permadi, Chavunda and Chavundaputra of the Sinda family of Yelburga (P.B. Desai: *Shasana Parichaya*—in Kannada—p.10).

king Harihara II, a copy of which is in Sri P. B. Desai's possession, Kuknur is mentioned as Mahamayasthana). Kuknur was important from the points of view of Jaina and later Veerashaiva faiths also. While the existence of two Jaina temples at this place is evident from two inscriptions—one dated 1027 A.D. and the other 1032 A.D. both from Maski (the former is now kept in the Hyderabad Archaeological Museum)—an inscription from Karajgi (district Dharwar) of the 17th century A.D. registers a gift to the temple of god Channabasaveshvara of Kuknur. A large number of *Siddhas*, *Yogis* and *Yoginis* came and settled there.

The place is also noted for its Vidyananda Gurukula which has been a pioneer nationalist educational institution in the region (*See* Chapter XV).

Kushtagi

KUSHTAGI (P. 7,204), headquarters town of the taluk of the same name, is about 101 miles west of Raichur. It is a notable commercial centre. The Adaviraya *jatra* held here annually is an important trade fair.

Lingsugur

LINGSUGUR (P. 9,505) is the headquarters of the taluk and the sub-division of the same name and is a commercial centre. Till 1905, it was the headquarters of the Lingsugur district. Neolithic implements like stone axes, hammers, flakes and cores and plain pottery were discovered here.

Manvi

MANVI (P. 8,715) is the headquarters town of the taluk of the same name and a centre of developmental activities under the Tungabhadra Project. It has a well-known temple of Jagannathaswami and an old fort now in ruined condition. (*See* also Chapter III under Pilgrim Centres and *Jatras*).

Maski

MASKI (P. 7,491), in Lingsugur taluk, situated 17 miles south-east of Lingsugur and 72 miles south-west of Raichur, on the right bank of a river of the same name, which is a tributary of the Tungabhadra, is highly interesting from the points of view of prehistory and protohistory. It must have been a town of considerable size and importance in the remote past, as is evident from the traces of its iron and gold workings covering a large area, and from the references made to it in a number of inscriptions ranging from the 10th to the 16th century A.D.

Maski has proved to be one of the most important prehistoric sites in the district. As early as 1888, the place was visited by Bruce Foote, who collected various kinds of neolithic implements and artifacts, which are now exhibited in the prehistoric section of the Madras museum. Later, when Mr. G. Yazdani, the then Director of Archaeology of the erstwhile Hyderabad State, visited the place in 1935-36, he was struck by the abundance of artifacts

which he noticed on the surface of some sites. Among these sites, the so-called fields of Sultan Muhammad were found to be particularly rich in antiquities. According to Yazdani, these fields constitute the site of the old town of Maski, access to which from the river-side was through a gorge amidst a ring of hills which surround the site. The hills have several spurs, the highest of which has a Shaivite temple which, from its architecture, appears to be of the thirteenth century A.D. On two other spurs near the gorge, are two other temples—one goldsmiths' and the other weavers'. "Weaving and gold-smelting are still the principal industries of the place."

Prehistoric finds

Maski, which has given numerous prehistoric finds, such as various types of megalithic burials, graves containing funerary urns made of burnt clay, vast traces of ancient metallurgy in the form of ash-mounds and several types of old-world implements and artifacts, has aptly been described as 'an antiquarian's delight.' But beads of various kinds of material such as crystal, amethyst, carnelian, lapis lazuli, agate and blood-stone and of diverse shapes—such as barrel-shaped, bipyramidal, globular, discoid and triangular—constitute the most striking of the artifacts found here. "The abundance of beads found at a single site shows that Maski at one time was an important centre of the bead industry. In later times, chank also seems to have been used on a large scale for various kinds of ornaments." There have been found finger-rings, ear-rings, bangles and necklaces. The abundance of the chank products reveals that the chank industry was also one of the principal occupations of the old Maski town. The approximate age of these finds has been fixed as from 500 B.C. to 300 B.C.

Some of the raw-materials for these industries, it should be remembered, had to be imported from distant places. Chank or shell must have been brought from the sea-coast, the nearest point being at least 150 miles away from the place. Some of the materials used for the bead-making industry, again, are not found locally, particularly lapis lazuli, which, it is said, was imported from Persia. These facts throw a flood of light on the trade connections of the district in those days. It may incidentally be mentioned that Greek writers have referred to the bead industry of Paithan—whence they were exported to western countries. We are told that in later days, they were also exported to the eastern countries like Malay Peninsula. We may infer that Maski, which was such an important centre of this industry, also took part in this international trade.

Coming to the later period, Maski has been the find-place of an Ashokan inscription, a version of the Rupnath edict. It was discovered on a boulder in a cavern by Mr. C. Beadon, a gold-mining engineer in 1915 (*See* Chapter II under Mauryas). Some other relics of the Buddhist period have also been found at this

place, amongst which is a discovery of an exquisite miniature head of the Buddha in crystal, dating from somewhere between 300 B.C. to 200 B.C.

Of the still later period, there are a number of inscriptions in which we find references to Maski. A Western Chalukyan inscription of Jagadekamalla (Shaka 949) calls the place as Rajadhani Piriya-Mosangi. His another inscription refers to it as Brahmapuri of Mosangi. An inscription of the Yadava king Singhana, of the 13th century A.D., also calls it Rajadhani Piriya-Mosangi. Two other inscriptions belonging to the times of the Vijayanagara kings, Achyutaraya and Sadashivaraya, call it as Mosage, the chief town of Mosage-nadu.

Matmari

MATMARI (P. 2,845), in Raichur taluk, is looked upon as a holy place. It has a temple dedicated to Veerabhadra and the well-known *Matha* of Sri Saviradevaru Channaveera Shivacharya Swami is nearby.

Mudgal

MUDGAL (P. 8,916), in Lingsugur taluk, a town about 10 miles south-west of Lingsugur, is one of the most important places of historical interest in the district, next in importance only to Raichur. Mudgal or Mudugal has a history dating back to the Yadava dynasty, several inscriptions of which have been discovered in and around the town. In the beginning of the 14th century, it was an important out-post of the Kakatiya kingdom. Malik Naib, after seizing Devagiri, captured Mudgal along with Raichur After the establishment of the Bahmani kingdom, Mudgal was the scene of frequent warfare between that dynasty and the kingdom of Vijayanagara. This position continued even after the disintegration of the Bahmani dynasty and the Bijapur kings took possession of the western and southern parts of the territory of the Bahmani kingdom including the forts of Raichur and Mudgal.

The most important object of interest at Mudgal is the fort. In the construction of the fort at Mudgal, advantage was taken of a hillock on the top of which were built houses of royalty and a wall with bastions The outer fortifications of Mudgal cover an area of half a square mile. The outer fort has a wide moat which is filled with water. The width of the moat varies, being as much as 50 yards at several places. Behind the moat, there is a scarp with a row of bastions and after that, a narrow covered passage and adjoining it the counter scarp with very massive bastions. From the arrangement of the existing fort, it is apparent that the fort was rebuilt after the invention of guns. The courses of masonry at several places are of Hindu style, but the arch-shaped parapet is of Muslim design. The moat and the row of bastions together offer a pleasing view.

In front of the Fateh Darwaza, which faces north, there is a very massive bastion, with a curtain on each side, thus making a barbican for the defence of the fort. Near this barbican is a guard's room with three arched openings towards the north. The barbican has a narrow court with entrances towards the west and north-east, the gates of which are built in the pillar-and-lintel style. In the covered passage of this gateway, there are guards' rooms on both sides. The massive bastion above referred to has a gun with a Kannada inscription near the muzzle. The gun has long iron pieces in its interior which have been bound outwardly by hoops.

There is another gateway on the western side, behind the narrow passage of which there is a second gateway with an arch. The walls at this point are cyclopean in construction. There are guards' rooms on either side of the passage of this gateway also. There is a third gateway to the left of the second, also arched, but the apex, as in the case of the previous one, is filled up with masonry. This gateway is more massive in construction than the other two, the guard's room attached to its passage also being more commodious. There is a mosque near this gateway, which consists of a double-pillared hall, the pillars being of Hindu design. On the opposite side of the road are the remains of the Naubat Khana. On the way to the Bala Hisar is the gun-powder magazine, where, at one end, two compartments have been built for the storage of gun-powder.

Citadel

The Bala Hisar or citadel is built at the top of the hillock and commands a good view of the interior of the fort as well as of the surrounding country. The view gives a good idea of the extent of the fort and of the large garrison which could be accommodated therein. There are several natural depressions in the rock above, which were utilised for storing water. Bastions and walls are built at different points for the defence of the buildings of the Bala Hisar. In the middle also, there is a large bastion, round in form. The hill near this bastion rises in the form of a spur and is detached from the lower parts of the hill by a ravine. There are some natural caverns below the Nauras Burj. The fort is defended towards the south-west by a range of hills. In the western part of the fort is a large cistern called the Hikrani Baoli--about 140 yards in length and 40 to 50 yards in breadth.

When coming out from the fort, we see that the first (innermost) gateway is arch-shaped, lofty and massive. The second gateway is built in rather a hybrid style—the openings of the main entrance being in the pillar-and-lintel style and those of the guards' rooms being arch-shaped. The plinth, the columns and ceiling of the guards' rooms are lavishly decorated

with sculpture. The outermost gate is built in the pillar-and-lintel style and the door is studded with iron spikes. It is called Kati Darwaza on account of the thorny appearance of the spikes. The panels of this door are decorated with figures of animals and gods carved in relief. A figure of a god holding a serpent is carved on the outer wall of the fort. There is another sculpture representing Hanuman. A bridge is built on the moat; but the approach is rather narrow.

There are, in this fort, at least seven inscriptions belonging to the Adil Shahi dynasty of Bijapur, 15 old Kannada inscriptions and two later inscriptions in Devanagari script.

There is an old Roman Catholic Church at this place. It is said that it stands on the foundation of one which had been built by Jesuits before 1557 during the reign of Ibrahim Adil Shah who had granted *inam* lands for its support. The original very old church was pulled down and another was built in its place later.

Mudval

MUDVAL (P. 161), in Lingsugur taluk, is situated at about 12 miles from Lingsugur. The village has a stone-wall which shows that it was of considerable importance at some time. This is one of the important pre-historic sites of the district. Artifacts were found on the slopes of the hill about a mile and a half to the west of the village. Gold crushers and iron slags were found in abundance near this place.

Mukkunda

MUKKUNDA (P.1,129), in Sindhanur taluk, is situated on the bank of the Tungabhadra, nearby a hill, about 20 miles from Sindhanur. There is an old and large fort on the top of the hill. At the entrance to the village, there is an old temple of Murari, built of stone. An island in the river has the *dargah* of Gaddi-khader Wali, where an annual *urs* is held which attracts a large number of people.

Munirabad

MUNIRABAD (P.6,322), in Koppal taluk, about eight kilometres from Hospet, on the Hubli-Guntakal metre-gauge railway line, has become an important place now, especially due to the construction of the Tungabhadra dam here. The Left Bank Canal from here, which passes through the Koppal, Gangavati, Sindhanur, Manvi and Raichur taluks, irrigates a large extent of agricultural lands in the district (*See* Chapter IV). It is humming with industrial activities also with a sugar factory, pulp and board mills and also a chemicals and fertilisers factory (*See* Chapter V).

The vast water-spread of the Tungabhadra reservoir here presents a fascinating spectacle and is a source of attraction for

the tourists. There are also a few well-furnished modern guest houses at the place, as also well laid-out flower gardens. Besides, a Japanese-type ornamental garden, which is the first of its kind in the State, is being laid out here and it will also be a source of attraction for tourists when completed. (*See* Chapter IV under Horticulture).

An inscription dated in the year 1088 A.D. found here mentions that this place was gifted to one Chauvedi (Chaturvedi) Bhatta, by the Chalukya king Vikramaditya VI. The former constructed an irrigation canal from the Tungabhadra river. Hulige is the old name of this place, called Vyaghrapuri in Sanskrit. It has a temple dedicated to Huligemma, which appears to have been built originally in the 13th century. There is a *dhwajasthamba*, which is of a height of about 25 feet, in front of the temple. Within the compound of the temple, there is a shrine of Parashurama. Nearby is a group of Panchalingeshwara shrines, only one of which is in a good state of preservation. There is also a Jaina *basadi*. Annually, a big *jatra* is held under the auspices of the Huligemma temple.

Naradagadde

NARADAGADDE : *See* under Korva (Kolan).

Pura

PURA (P.366), in Kushtagi taluk, about five miles from Tawargera, is noted for its fine and spacious temple of Someshvara which has 'Kotilingas', where annually a big *jatra* is held in the month of Shravana.

Raichur

RAICHUR (P.63,329), the headquarters town of the district, is an important commercial, industrial and educational centre. The place is of considerable antiquity. (*See* Chapter I under Origin of Name). It was captured by Malik Kafur in 1312 and subsequently it was in the hands of Vijayanagara, Bahmani, Bijapur, Mughal and Asaf Jahi kings. (*See* Chapters II, V, VI and XV).

The hill fort of Raichur, which was of great importance in the past, is surrounded on three sides by a double row of massive but low circuit walls. The inner wall, which is constructed of huge blocks of well-dressed and nicely fitted stones without the aid of any cementing material, is the work of the Hindus, according to a long Kannada inscription dated A.D. 1294 on a slab in the western inner wall. The outer wall which is built of comparatively rough stone masonry, is, on the other hand, the work of the Muslims. The outer fortifications contain five gateways: the Mecca Darwaza on the west, the Naurangi Darwaza on the north, the Kati Darwaza on the east, the Khandak Darwaza on the south and the Doddi Darwaza on the south-west. The inner

wall has two gateways : the Sailani Darwaza on the west and the Sikandari Darwaza on the east.

The area inside the fort-walls abounds in the remains of ancient objects, of which a few important ones have been described here. The Mecca Darwaza and the adjoining walls were, according to the Persian inscriptions on the arches of the gateway, built by the command of one Mallu Khan in 1470 during the reign of the Bahmani king Muhammad Shah III. The modern road starting from the railway station and leading into the town passes through this gateway.

The road proceeding from this entrance passes through a gap in the inner wall, just by the side of the long Kannada inscription referred to above. At a little distance to the right of this epigraph, there are some marvellous drawings. (*See* Chapter II under Archaeology). Some distance to the south of these drawings, near the ancient quarry, is a large depression locally known as Banda Baoli. Further to the south, near the fort of the hill, is the Doddi Darwaza, a double-arched entrance, in the Muslim wall. Near this gateway is a beautiful circular well constructed of fine stone masonry with a long staircase leading right to the bottom ; but the well is now dry.

Tomb

The gap in the inner wall mentioned above was made recently to give access to the road. Adjoining the Hindu wall, there is the tomb of a Muslim saint, Pir Sailani Shah. This is a handsome and fascinating structure built in Bijapur style, comprising a small rectangular hall, with an one-arched opening in each face—the arches resting on small stone pillars carved in Chalukyan fashion—and surmounted by a beautiful narrow-necked dome set on a circular row of lotus petals and ornamented with four small slim turrets at the corners. The big gateway situated here derives its name from the name of the saint and is called Sailani Darwaza. The road issuing from the gap proceeds eastwards. Some distance beyond the Hindu wall and to the south of the road, there is a large square cistern built of solid stone masonry. Further to the south and at the foot of the hillock, is a small mosque called the Kali Masjid, in the construction of which Hindu material has been freely used, as is evident from the beautifully polished Chalukyan pillars of black basalt and the fragments of Kannada inscriptions found on the slabs in its walls.

Fort Jami Masjid

The road next passes by the side of the Fort Jami Masjid situated to the north of the road. It is a handsome structure having two entrances, one in the south and the other in the east. The southern entrance, which is supported on six massive stone pillars of the Chalukyan style with square bases, cruciform

capitals and circular and decorated middle portions, seems to have originally been the *mantapa* of some temple. Just opposite the entrance in the courtyard of the mosque is a cemetery which is said to contain the graves of some members of the Adil Shahi dynasty. The eastern entrance of the mosque is crowned with three small domes, the middle one of which is circular and the other two pyramidal. To the left of this entrance, outisde the mosque proper, is a deep well of considerable dimensions with masonry walls of stone all round.

Opposite the Jami Masjid are the remains of an ancient Hindu palace. Of the original palace, there is very little remaining now, except the old walled enclosure and the big entrance by the side of the present jail. The jail also is said to have originally formed part of this building. But the alterations and modifications of the present day, suiting the requirements of the jail, have completely deprived the building of all its antiquarian grandeur and interest.

Opposite the ruins of the palace and near the Sikandari Darwaza is a small mosque called Daftarki-Masjid. The material used for the construction of this also has been taken from some ruined Hindu temples. The mosque is entered through a domed structure, the lintel and brackets of which are supported on the pillars of that temple. The pillars in the prayer-hall are also of typically of Chalukyan workmanship. The mosque has in front a deep, oblong well, built with stone masonry.

At this point, the road gets into the Sikandari Darwaza, which formed the eastern entrance of the Hindu fortifications. The gateway has two arched entrances, one facing the west and the other south. The former, which is crowned with a battlemented parapet, is in a ruined condition. On the faces of the two walls immediately adjoining are traces of old Kannada inscriptions, which are almost completely obliterated by the conquerors, as is clear from the various geometrical designs purposely made to chisel out the original writings.

Ek-Minar-ki-Masjid

A little further, to the left of the road, is an interesting mosque known as the Ek-Minar-ki-Masjid. This mosque, according to the Persian inscription on its threshold, was constructed by one Amber. In this mosque also, the pillars supporting the roof of the entrance are all Chalukyan pillars. It has only one minaret, as its name itself suggests. The minaret, about 65 ft. high and 13 ft. in diameter, is built in Persian style and is identical in form with the Chand Minar at Daulatabad erected in 1445 by Ala-ud-din Bahmani and the minaret of the famous college of Mahmud Gawan at Bidar built during 1472. The minaret, which consists of two storeys, each furnished with windows and

surrounded by projecting galleries girded with stone balustrades, gradually tapers from bottom to top and has, at the top, a round dome in the Bahmani style. A winding staircase leads up to the top-storey, from which an excellent view of the town can be had. Apart from its architectural peculiarities, this mosque, as the inscriptions in the building show, is the oldest place of Muslim worship in the town.

Another Jami Masjid

The road next leads to the Kati Darwaza, which marks the eastern limit of the Muslim fortifications. Outside the fort-walls in the same direction, is another Jami Masjid, which forms the biggest place of Muslim worship in the town. Entered through an arched entrance facing the south, the mosque has a vast rectangular courtyard in front and an oblong water cistern in the south-east corner. The prayer hall is fairly large, being 101′ 6″ by 24′ 5″ internally, with eleven arched openings facing the east. On either side is a tall stone minaret in beautiful Bijapur style and the top is decorated with small turrets and a battlemented parapet. The flat ceiling of the mosque is supported on two rows of 10 pillars each in plain Chalukyan style.

There is another road which starts from the old tank in the south and leads right up to the Naurangi Darwaza in the north. It first enters through the Khandak Darwaza, a ruined gateway. A little distance along the road, to the west, is an extensive rectangular well, called Khas Baoli, which is built of solid stone masonry and approached by means of big staircases in the corners. In the centre of the well is a high platform approached through a causeway from the west. The well is said to have supplied water to the entire fort area. A little further, in the opposite direction, is another, comparatively smaller and well-known as Andheri Baoli; it is reached by a staircase from the north.

From here, upto the Naurangi Darwaza, there are a number of old small mosques and other minor structures. The Naurangi Darwaza was so designated because of the lavishly painted and sculptured decorations which once adorned the gateway. The material used for its construction, from its mythological and artistic peculiarities, appears to have belonged originally to Hindu structures. The first gate of this entrance, facing the south, is flanked by a bastion on either end, one of them being square and the other circular. On a square stone slab in the former bastion, is a well-carved figure of a Naga king, seated cross-legged in meditation on a fish, with a crown of five serpent-hoods on his head. Here, on other slabs, are carved various scenes from Hindu mythology.

Citadel

Lastly, the Bala Hisar or the citadel is situated on the middle and the loftiest of the hills in the south-west corner of the fort.

It is approached first by a flight of steps rising near the south-east corner of the inner fort-wall upto a door-way in the middle, then by a gradual slope which is not difficult of ascent and again by a few steps leading to the entrance which is fitted with a rectangular door-frame. The citadel stands on an irregularly shaped platform on the summit of the hill. The northern side is occupied by the durbar hall, a double three-arched and triple-domed structure measuring about 36 feet by 25 feet internally, with a battlemented and loop-holed parapet on the top. To the west of this hall is a small mosque, in Bijapur style, with one arch and two slim minarets. To the east is a small square open pavilion, with a square pyramidal dome supported on four pillars showing Hindu features.

In front of the hall is a square cistern, now filled with earth, and next to this, there is a circular platform, 32 feet in diameter, supporting a gun in the middle. The gun, mounted on a turn-table and facing the east, is 20′ 3″ long, with a circumference of 4′ 4″ at its breech, the diameter of the bore being five inches. To the west of the gun, is the Panch Bibi Dargah or the Dargah of five lady saints. At the back of the hall, among the rocks, is lying the lower portion of a seated *nandi* or bull carved in granite. The remains of this *nandi* and the square pavilion mentioned above appear to be the only surviving portions of the Hindu works on the citadel. The pavilion perhaps originally formed a *mantapa* of some Hindu temple that might have once stood on the summit of the hill.

Ramagadde

RAMAGADDE (P. 14), in Raichur taluk, about 14 miles north of Raichur, is a beautiful island in the Krishna. It is looked upon as a holy place. According to a legend, Sri Ramachandra stayed here for a year and consecrated and worshipped a Shiva-linga. It has a Veerashaiva *Matha*.

Roudkunda

ROUDKUNDA (P. 1,690), in Sindhanur taluk, is situated about six miles to the east of Gorebal, the latter being on the Sindhanur-Gangavati road. The place seems to be an ancient one, since it is one of the important neolithic sites in the district. To the west of the village, there are two hillocks, one of them having a small fort on it belonging to the 16th or 17th century A.D. Artifacts were found in abundance both in the valley between the two hillocks and on the slopes of the hillock having the fort.

Sindhanur

SINDHANUR (P.9,455) is the headquarters of the taluk of the same name and is a commercial centre for cotton. It occupies a central place in the Tungabhadra avacut area in the district and is an important centre of developmental activities under the Tungabhadra Project.

Somalapur

SOMALAPUR (P. 823), in Sindhanur taluk, about 14 miles from Sindhanur, is well known for its Ambadevi temple, situated at the foot of a hill, where annually a fair takes place in the month of Pushya, which is largely attended.

Venkatapur

VENKATAPUR (P. 376), in Lingsugur taluk, is about three miles due north of Maski. To the south of this village are two hills, along the skirts of which 45 cairns were found in a good condition of preservation. Some of them are in pairs. On the western side of these hills, there is another group of cairns with double rings, the outer ring in some cases having a diameter of about 50 feet. On the northern side of the hills, there are a few traces of square constructions which appear to be old.

Yelburga

YELBURGA (P. 5,004) is the headquarters town of the taluk of the same name and a commercial centre. Yerambarage was its old name. It is a historical place and was the capital of the Sindas. (*See* Chapter II under Sindas).

APPENDICES

GENERAL

ENGLISH TRANSLATION OF THE MASKI ROCK INSCRIPTION OF ASHOKA.*

(A proclamation) of Devanampriya Asoka. Two and a half years (and somewhat more) (have passed) since I am a Buddha-Sakya. (A year and) somewhat more (has passed) (since) I have visited the Sangha and have shown zeal. Those gods, who formerly had been unmingled (with men) in Jambudvipa, have now become mingled (with them). This object can be reached even by a lowly (person) who is devoted to morality. One must not think thus—(*viz.*) that only an exalted (person) may reach this. Both the lowly and the exalted must be told: 'If you act thus, this matter (will be) prosperous and of long duration, and will thus progress to one and a half'.

(*Corpus Inscriptionum Indicarum*, Vol. I—new edition—p. 175)

ENGLISH TRANSLATION OF THE GAVIMATH ROCK INSCRIPTION OF ASHOKA.*

Devanampriya says: (It is) more than two and a half years since I have been a lay-worshipper; but I have not indeed acted very zealously. (It is) more than a year since the community was joined by me and I have acted very zealously. Thus in this time in Jambudvipa unmingled (were) the gods with men; they now have been made mingled. This is the fruit of zeal. For this cannot be obtained by only a great man; on the other hand, by a lowly man acting zealously, wide heaven also can be attained. And for this matter, this proclamation: that both the lowly and exalted may act zealously; and the borderers also may know and zealous action may be long-lasting and this matter shall grow and shall grow wide and shall grow half as much again.

(The Gavimath and Palkigundu Inscriptions of Asoka edited by R. L. Turner, Hyderabad Archaeological Series, No. 10, pp. 15-16).

*The edicts are in Prakrit. Only a few letters of the third inscription of Ashoka found at the Palkigundu hill near Koppal in the district are legible and it is believed to be identical with the Gavimath version. See also Chapters II and XIX and illustrations.

TABLE 1

Area and Population—Urban and Rural—of Raichur District as in 1961

Sl. No.	*Taluk*	*Area in square miles*	*Area in square kilometres*	*Population in 1961*	*Density* per square mile	*Density* per square kilometre	*Population in 1951*	*Percentage increase/decrease over 1951*
1	2	3	4	5	6	7	8	9
1.	Deodurg ..	594.6	1,540.1	1,03,855	175	67	89,815	+ 15.63
2.	Gangavati ..	513.9	1,331.0	1,13,258	220	85	86,921	+ 30.30
3.	Koppal ..	542.1	1,404.0	1,30,571	241	93	1,30,855	— 0.22
4.	Kushtagi ..	535.7	1,387.5	1,05,947	198	76	1,00,601	+ 5.31
5.	Lingsugur ..	739.2	1,914.5	1,35,253	183	71	1,11,658	+ 21.13
6.	Manvi ..	749.4	1,940.9	1,23,677	165	64	1,04,724	+ 18.10
7.	Raichur ..	587.5	1,521.6	1,74,355	297	115	1,49,593	+ 16.55
8.	Sindhanur ..	627.8	1,626.0	96,957	154	60	75,750	+ 28.00
9.	Yelburga ..	545.3	1,412.3	1,17,022	215	83	1,03,723	+ 12.82
	Total ..	5,435.5*	14,077.9*	11,00,895	203	78	9,53,640	+ 15.44

* According to the Central Statistical Organisation of the Government of India, the area of the district is 5,410 square miles or 14,013 square kilometres. This slight difference is due to the different methods employed in measuring the area. *See* also Chapter I.

TABLE II

Taluks in Raichur district classified by population in 1961 with variation since 1901.

Taluk	Year	Persons	Variation	Males	Variation	Females	Variation
1	2	3	4	5	6	7	8
1. Deodurg	1901	82,859	..	..	..	..	..
	1911	88,970	+6,111	..	..	..	..
	1921	82,537	—6,433	..	..	..	..
	1931	78,656	—3,881	..	..	..	..
	1941	87,818	+9,162	..	..	..	..
	1951	89,815	+1,997	44,807	..	45,008	..
	1961	103,855	+14,040	52,031	+7,224	51,824	+6,816
2. Gangavati	1901	61,116	..	..	..	..	..
	1911	65,624	+4,508	..	..	..	..
	1921	60,817	—4,807	..	..	..	..
	1931	67,637	+6,820	..	..	..	..
	1941	73,227	+5,590	..	..	..	..
	1951	86,921	+13,694	44,311	..	42,610	..
	1961	113,258	+26,337	57,942	+13,631	55,316	+12,706
3. Koppal	1901	76,029	..	..	..	..	..
	1911	81,637	+5,608	..	..	..	..
	1921	79,234	—2,403	..	..	..	..
	1931	85,547	+6,313	..	..	..	..
	1941	96,219	+10,672	..	..	..	..
	1951	130,855	+34,636	67,877	..	62,978	..
	1961	130,571	—284	66,149	1,728	64,422	+1,444

Table II—*contd.*

1	2	3	4	5	6	7	8
4. Kushtagi	1901	70,641	..	..	..	..	..
	1911	75,851	+5,210	..	..	..	..
	1921	68,117	—7,734	..	..	..	..
	1931	79,924	+11,807	..	..	..	..
	1941	91,656	+11,732	..	..	..	..
	1951	100,601	+8,945	50,442	..	50,159	..
	1961	105,947	+5,346	53,676	+3,234	52,271	+2,112
5. Lingsugur ..	1901	90,202	..	..	..	..	..
	1911	96,855	+6,653	..	..	..	..
	1921	78,618	18,237	..	..	..	..
	1931	86,061	+7,443	..	..	..	..
	1941	103,747	+17,686	..	..	..	..
	1951	111,658	+7,911	55,845	..	55,813	..
	1961	135,253	+23,595	68,040	+12,195	67,213	+11,400
6. Manvi	1901	90,114	..	..	..	..	..
	1911	96,761	+6,647	..	..	..	..
	1921	94,982	—1,779	..	..	..	..
	1931	93,013	—1,969	..	..	..	..
	1941	96,289	+3,276	..	..	..	..
	1951	104,724	+8,435	51,988	..	52,736	..
	1961	123,677	+18,953	61,207	+9,219	62,470	+9,734

Table II—*concld.*

1	2	3	4	5	6	7	8
7. Raichur	1901	113,505	..	..	..	..	..
	1911	121,877	+8,372	..	..	..	..
	1921	110,841	—11,036	..	..	..	..
	1931	123,277	+12,436	..	..	..	..
	1941	135,439	+12,162	..	..	..	..
	1951	149,593	+14,154	74,727	..	74,866	..
	1961	174,355	+24,762	88,092	+13,365	86,263	+11,397
8. Sindhanur ..	1901	69,695	..	..	..	..	..
	1911	74,835	+5,140	..	..	..	..
	1921	66,363	—8,472	..	..	..	..
	1931	72,781	+6,418	..	..	..	..
	1941	77,426	+4,645	..	..	..	..
	1951	75,750	—1,676	37,828	..	37,922	..
	1961	96,957	+21,207	48,591	+10,763	48,366	+10,444
9. Yelburga ..	1901	77,140	..	..	..	..	..
	1911	82,830	+5,690	..	..	..	..
	1921	82,631	—199	..	..	..	..
	1931	84,994	+2,363	..	..	..	..
	1941	95,712	+10,718	..	..	..	..
	1951	103,723	+8,011	51,890	..	51,833	..
	1961	117,022	+13,299	58,815	+6,925	58,207	+6,374

Note : The sex break-up for the years 1901, 1911, 1921, 1931 and 1941 is not available.

TABLE III

Towns and Town-groups in Raichur district classified by population in 1961 with variations since 1901

Name of Town	Year	Persons	Decade variation	Percentage decade variation	Males	Females
1	2	3	4	5	6	7
1. Raichur	1901	22,165	..	..	9,982	12,183
	1911	25,034	+2,869	+12.94	12,681	12,353
	1921	26,374	+1,340	+5.35	13,323	13,051
	1931	27,910	+1,536	+5.82	14,026	13,884
	1941	34,972	+7,062	+25.30	18,005	16,967
	1951	54,032	+19,060	+54.50	27,105	26,927
	1961	63,329	+9,297	+17.21	32,482	30,847
2. Koppal	1901	8,903	..	..	4,511	4,392
	1911	7,558	—1,345	—15.11	3,916	3,642
	1921	9,187	+1,629	+21.55	4,661	4,526
	1931	9,979	+792	+8.62	5,157	4,822
	1941	13,970	+3,991	+39.99	7,141	6,829
	1951	17,314	+3,344	+23.94	8,984	8,330
	1961	19,530	+2,216	+12.80	10,011	9,519

Table III—*contd.*

1	2	3	4	5	6	7
3. Gangavati	1901	6,245	..	..	3,037	3,208
	1911	6,663	+418	+6.69	3,238	3,425
	1921	6,027	—636	—9.55	2,970	3,057
	1931	6,722	+695	+11.53	3,356	3,366
	1941	7,613	+891	+13.25	3,840	3,773
	1951	16,263	+8,650	+113.62	8,323	7,940
	1961	19,026	+2,763	+16.99	9,764	9,262
4. Lingsugur	1951	7,835	..	..	3,919	3,916
	1961	9,565	+1,730	+22.08	4,861	4,704
5. Sindhanur	1901	5,242	..	..	2,623	2,619
	1911	5,578	+336	+6.41	2,733	2,845
	1921	4,623	—955	—17.12	2,256	2,367
	1931	5,553	+930	+20.12	2,731	2,822
	1941	6,377	+824	+14.84	3,244	3,133
	1951	7,516	+1,139	+17.86	3,750	3,766
	1961	9,455	+1,939	+25.80	4,870	4,585
6. Mudgal	1901	7,729	..	..	3,825	3,904
	1911	6,947	—782	—10.12	3,455	3,492
	1921	4,507	—2,440	—35.12	2,242	2,265
	1931	4,955	+448	+9.94	2,403	2,552
	1941	6,226	+1,271	+25.65	3,122	3,104
	1951	7,054	+828	+13.30	3,496	3,558
	1961	8,916	+1,862	+26.40	4,503	4,413

Table III—*concld.*

1	2	3	4	5	6	7
7. Manvi	1901	6,253	..	..	3,097	3,156
	1911	6,679	+426	+6.81	3,359	3,320
	1921	6,250	—429	—6.42	3,098	3,152
	1931	6,500	+250	+4.00	3,250	3,250
	1941	7,312	+812	+12.49	3,647	3,665
	1951	7,903	+591	+8.08	3,881	4,022
	1961	8,715	+812	+10.27	4,346	4,369
8. Deodurg	1901	6,773	..	..	3,343	3,430
	1911	6,837	+64	+0.94	3,334	3,503
	1921	6,652	—185	—2.71	3,219	3,433
	1931	6,412	—240	—3.61	3,107	3,305
	1941	7,433	+1,021	+15.92	3,759	3,674
	1951	7,767	+334	+4.49	3,896	3,871
	1961	8,560	+793	+10.21	4,319	4,241
9. Kushtagi	1931	4,460	..	..	2,287	2,173
	1941	..	..	Declassified	..	..
	1951	6,082	..	..	3,165	2,917
	1961	7,204	+1,122	+18.45	3,680	3,524
10. Munirabad Project Area	1951	18,555	..	..	10,365	8,190
	1961	6,322	—12,233	—65.93	3,568	2,754

TABLE IV

Occupational classification of persons at work (other than cultivation) in Raichur district as in 1961

Sl. No.	Occupations	Males	Females	Total
1	2	3	4	5
1.	Engineers, Architects and Surveyors	330	..	330
2.	Physicians, Surgeons and Dentists	242	7	249
3.	Nurses, Pharmacists and other Medical and Health Technicians	432	107	539
4.	Teachers	2,000	267	2,267
5.	Jurists (including Legal Practitioners and Legal Advisers)	251	..	251
6.	Artists, Writers and related workers	387	16	403
7.	Administrative, Executive and Managerial workers (both Government and private)	3,278	174	3,452
8.	Clerical and related workers (including Stenographers, Typists, Book-keepers, Cashiers, etc.)	6,101	199	6,300
9.	Unskilled office-workers (including Attendants, etc.)	2,545	151	2,696
10.	Working Proprietors—wholesale and retail trade	9,659	2,254	11,913
11.	Salesmen, Shop-Assistants and related workers	1,771	330	2,101
12.	Farmers, Farm-Workers (Animals, birds and insect rearing, Fishermen, Gardeners, Tappers, etc.)	8,267	1,675	9,942
13.	Workers in Transport and Communication occupations (including Railways, Road Transport, Posts and Telegraphs, etc.)	2,620	19	2,639
14.	Spinners, Weavers, Dyers and related workers	3,919	4,265	8,184
15.	Tailors, Cutters and related workers	2,447	719	3,166

Table IV—*concld.*

1	2	3	4	5
16.	Shoe-makers, Shoe-repairers, Leather-cutters and related workers	639	49	688
17.	Blacksmiths, Furnacemen and related workers	1,160	61	1,221
18.	Jewellers, Goldsmiths and Silversmiths	1,250	52	1,302
19.	Tool-makers, Machinists, Welders and related workers	1,281	50	1,331
20.	Electricians and related workers	216	..	216
21.	Carpenters, Cabinet-makers and related workers	2,974	353	3,327
22.	Brick-layers, Plasterers, Stone-cutters and other construction workers	4,054	806	4,860
23.	Potters, Kilnmen, Clay-formers and related workers	790	573	1,363
24.	Millers, Bakers, Oilseed–pressers, Pounders and related food and beverage workers	1,242	337	1,579
25.	Basket-weavers and production process workers	1,924	2,880	4,804
26.	Policemen, Guards, Watchmen and related workers	1,125	7	1,132
27.	Cooks, Maids, House-keepers and related workers	1,578	482	2,060
28.	Waiters, Bar-tenders and related workers	625	31	656
29.	Cleaners, Sweepers, Watermen, Building-caretakers, etc.	770	299	1,069
30.	Barbers, Hair-dressers and related workers	1,366	4	1,370
31.	Washermen, Laundrymen and Dhobies	1,449	1,856	3,305
32.	Labourers, not classifiable by occupation	292	22	314

Source : Census of India, 1961, Vol. XI, Mysore, Part II-B (ii), General Economic Tables.

TABLE V

Livestock Population in Raichur District

A—Cattle and Buffaloes as per Livestock Censuses of 1961 and 1966

Sl. No.	Taluk	Cattle 1961 Male	Cattle 1961 Female	Cattle 1961 Total	Cattle 1966 Male	Cattle 1966 Female	Cattle 1966 Total	Buffaloes 1961 Male	Buffaloes 1961 Female	Buffaloes 1961 Total	Buffaloes 1966 Male	Buffaloes 1966 Female	Buffaloes 1966 Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Deodurg ..	25,380	26,656	52,036	30,356	24,554	54,910	2,489	11,763	14,252	2,099	9,142	11,241
2.	Gangavati ..	34,646	20,017	54,663	34,160	22,960	57,120	2,766	12,003	14,769	3,981	13,532	17,513
3.	Koppal ..	30,211	20,824	51,035	30,178	19,749	49,927	1,929	13,353	15,282	3,296	12,136	15,432
4.	Kushtagi ..	33,203	20,948	54,151	31,436	25,403	56,839	2,124	12,511	14,635	2,996	11,654	14,650
5.	Lingsugur ..	42,373	28,970	71,343	37,835	29,979	67,814	3,351	17,049	20,400	3,204	17,980	21,184
6.	Manvi ..	31,801	17,615	49,416	31,694	17,571	49,265	1,815	11,635	13,450	3,105	11,331	14,436
7.	Raichur ..	30,430	17,259	47,689	29,513	14,686	44,199	3,652	9,663	13,315	3,063	9,702	12,765
8.	Sindhanur ..	24,151	11,732	35,883	9,191	13,683	22,874	1,016	8,118	9,134	4,404	13,906	18,310
9.	Yelburga ..	33,128	17,764	50,892	25,581	14,085	39,666	2,143	12,246	14,389	2,005	10,068	12,073
	Total ..	2,85,323	1,81,785	4,67,108	2,59,944	1,62,670	4,42,614	21,285	1,08,341	1,29,626	28,153	109,451	137,604

Table V—*contd.*

B—Number of other Livestock as ascertained by Livestock Censuses of 1961 and 1966

Sl. No.	Taluk		*Sheep*		*Goats*		*Horses and Ponies*		*Mules*		*Donkeys*		*Pigs*		*Camels*	
			1961	1966	1961	1966	1961	1966	1961	1966	1961	1966	1961	1966	1961	1966
1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Deodurg	..	36,028	28,218	32,111	16,765	698	1,567	6	..	655	420	471	..	1	1
2.	Gangavati	..	22,696	24,092	12,643	16,817	432	353	12	..	362	115	3,761	1,224	3	..
3.	Koppal	..	18,284	17,371	15,078	15,638	176	..	..	..	306	282	627	320	..	..
4.	Kushtagi	..	18,751	17,813	21,267	18,658	305	639	9	..	292	74	202	78	..	..
5.	Lingsugur	..	43,198	33,742	34,150	24,399	578	549	1	..	421	8	1,181	442	..	..
6.	Manvi	..	31,386	27,885	17,279	14,749	337	559	..	..	679	196	765	1,020	..	..
7.	Raichur	..	47,935	37,572	13,521	15,740	345	162	29	8	503	125	1,459	553	13	..
8.	Sindhanur	..	12,841	23,146	13,516	18,081	201	312	..	..	356	84	221	316	..	..
9.	Yelburga	..	15,363	15,842	12,487	13,471	154	708	..	50	186	448	210	1,224	..	..
	Total	..	2,46,482	2,25,681	1,72,052	1,54,318	3,226	4,849	57	58	3,760	1,752	8,897	5,177	17	1

Table V—*contd.*

C—Number of Poultry as per Livestock Census of 1961

Sl. No.	*Taluk*	*Fowls*				*Ducks*				*Others*	*Total Poultry*
		Hens	*Cocks*	*Chicken*	*Total*	*Ducks*	*Drakes*	*Ducklings*	*Total*		
1	2	3	4	5	6	7	8	9	10	11	12
1.	Deodurg	10,740	3,568	13,643	27,951	15	3	..	18	..	27,969
2.	Gangavati	10,668	3,251	12,252	26,171	715	81	49	845	13	27,029
3.	Koppal	9,465	2,425	7,792	19,682	25	50	32	107	13	19,802
4.	Kushtagi	12,684	2,702	8,490	23,876	14	5	3	22	4	23,902
5.	Lingsugur	12,980	4,326	13,007	30,313	19	25	14	58	11	30,382
6.	Manvi	6,401	1,916	6,100	14,417	6	16	37	59	..	14,476
7.	Raichur	10,061	4,235	9,913	24,209	73	32	32	137	25	24,371
8.	Sindhanur	3,883	2,407	1,341	7,631	..	..	..	..	..	7,631
9.	Yelburga	8,285	2,336	3,893	14,514	..	..	..	..	..	14,514
	Total ..	85,167	27,166	76,431	1,88,764	867	212	167	1,246	66	1,90,076

Table V—concld.

C—Number of Poultry as per Livestock Census of 1966

Sl. No.	Taluk	Fowls				Ducks				Others	Total Poultry
		Hens	Cocks	Chicken	Total	Ducks	Drakes	Ducklings	Total		
1	2	3	4	5	6	7	8	9	10	11	12
1.	Deodurg	4,269	6,971	5,074	16,314	477	11	11	499	..	16,813
2.	Gangavati	12,284	882	7,355	20,521	..	..	..	..	..	20,521
3.	Koppal	10,695	7,037	..	17,732	..	..	..	..	..	17,732
4.	Kushtagi	8,057	5,001	4,569	17,627	..	..	..	..	..	17,627
5.	Lingsugur	12,272	9,068	4,787	26,127	..	..	..	..	..	26,127
6.	Manvi	8,476	169	6,681	15,326	..	..	..	..	..	26,127
7.	Raichur	2,677	2,868	2,846	8,391	706	1,204	1,264	3,174	203	18,703
8.	Sindhanur	6,756	4,598	3,273	14,627	710	1,683	1,026	3,419	..	11,810
9.	Yelburga	6,422	1,370	5,539	13,331	..	..	..	..	..	14,627
						3	..	..	3	67	13,401
	Total ..	71,908	37,964	40,124	1,49,996	1,896	2,898	2,301	7,095	270	1,57,361

TABLE VI

Particulars of some important shandies in Raichur district.

Sl. No.	Name of Shandy	Name of taluk	Day when held	Principal commodities dealt with	Wholesale or retail	Average attendance	
1.	Chavani	Lingsugur	Saturday	Bajra, Jowar, Wheat	Retail	Above	1,000
2.	Hutti	,,	Sunday	Pulses, Vegetables	,,	,,	1,000
3.	Gurgunta	,,	Friday	,,	,,	,,	1,000
4.	Mudgal	,,	Monday	,,	,,	,,	1,000
5.	Maski	,,	Sunday	,,	,,	,,	3,000
6.	Gangavati ..	Gangavati	Sunday	Jowar, Paddy, Rice, Groundnut and Jaggery	Whole sale & Retail	,,	5,000
7.	Karatgi	,,	Wednesday	Jowar, Bajra, Kangni	Retail	,,	5,000
8.	Sriramnagar Camp (Hebbal)	,,	Thursday	,,	,,	,,	5,000
9.	Anegundi	,,	Wednesday	,,	,,	,,	5,000
10.	Kanakgiri	,,	Monday	,,	,,	,,	5,000
11.	Siddapura	,,	Tuesday	,,	,,	,,	5,000
12.	Koppal ..	Koppal	Thursday	Jowar, Paddy, Rice, Wheat, Bajra, Groundnut	Wholesale & Retail	,,	1,000
13.	Manvi	Manvi	Wednesday	Foodgrains and cloths	,,	,,	1,000
14.	Mangalur	Yelburga	Tuesday	Vegetables and Foodgrains	,,	,,	1,000
15.	Yelburga	,,	Saturday	,,	,,	,,	
16.	Dankalkatta	,,	Tuesday	,,	,,	,,	2,500
17.	Mardi	,,	Monday	,,	,,	,,	1,000
18.	Kuknur	,,	Friday	,,	,,	,,	1,000
19.	Tadakal	,,	Monday	,,	,,	,,	3,000
20.	Raichur	Raichur	Monday	Vegetables, Foodgrains, cloths, etc.	,,	,,	2,000
					,,	5,000 to	6,000

TABLE VII

Particulars of Inspection and Travellers' Bungalows in the two divisions of Public Works Department in Raichur district

Sl. No.	*Taluk*	*Place where Travellers' Bungalow or Inspection Bungalow is located*	*Class*	*Distance from town, bus stand, railway station or main road*
1	2	3	4	5
(1)	Raichur	Raichur	I. B. Class I	About 1¼ miles from town, 1 mile from bus stand and 3 furlongs from railway station.
(2)	Raichur	do	T. B. Class II (New)	About 1¼ miles from town, 1 mile from bus stand and 3 furlongs from railway station.
(3)	Raichur	do	T. B. Class II (Old)	About 7 furlongs from town, 5 furlongs from bus stand and 1½ furlongs from railway station.
(4)	Raichur	Chandarbanda	I. B. Class II	About ½ furlong from town.
(5)	Raichur	Devarsugur	do	About 6 furlongs from Hyderabad—Bangalore main road.
(6)	Raichur	Yergera	do	About ½ furlong from town.
(7)	Lingsugur	Lingsugur	I. B. Class I	About one furlong from town; one furlong from bus stand.
(8)	Lingsugur	Maski	I. B. Class II	About ½ furlong from bus stand.
(9)	Lingsugur	Mudgal	do	About 1½ furlongs from bus stand.
(10)	Manvi	Bayalmerchaid	do	About ½ furlong from town.
(11)	Manvi	Kavital	do	About ½ furlong from town.
(12)	Manvi	Kurkunda	do	Near the bus stand.

Table VII—*concld.*

1	2	3	4	5
(13)	Manvi	Manvi	I. B. Class II	About one mile from bus stand.
(14)	Manvi	Sirvar	do	About 4 furlongs from bus stand.
(15)	Deodurg	Deodurg	do	About one furlong from bus stand.
(16)	Deodurg	Jalhalli	do	do do
(17)	Deodurg	Ramdurg	do	About one furlong from town.
(18)	Koppal	Koppal	I. B. Class I	About one furlong from Koppal-Yelburga main road.
(19)	Sindhanur	Sindhanur	do	On Raichur—Ginigera main road.
(20)	Gangavati	Gangavati	do	About one furlong from bus stand.
(21)	Kushtagi	Kushtagi	do	do do
(22)	Yelburga	Yelburga	do	Very near the Koppal—Yelburga road.
(23)	Kushtagi	Tawargera	T. B. Class II	About 4 furlongs from junction point of Lingsugur—Gangavati road and Sindhanur—Tawargera road.
(24)	Koppal	Munirabad	I. B. Class II	..
(25)	Gangavati	Kanakgiri	do	About 4 furlongs from Lingsugur—Gangavati road.
(26)	Sindhanur	Dhadesugur	do	Road side.

Metric Weights and Measures

Length—

10	millimetres = 1 centimetre
100	centimetres = 1 metre
1,000	metres = 1 kilometre
1,852	metres = 1 nautical mile (international)

Area—

100	square millimetres = 1 square centimetre
10,000	square centimetres = 1 square metre or centiare
100	square metres = 1 are
100	ares = 1 hectare
100	hectares or 1,000,000 square metres = 1 square kilometre

Volume—

1,000,000	cubic centimetres = 1 cubic metre

Capacity—

1,000	millilitres = 1 litre
1,000	litres = 1 kilolitre

Weights—

1,000	milligrams = 1 gram
1,000	grams = 1 kilogram
100	kilograms = 1 quintal
1,000	kilograms = 1 tonne
200	milligrams = 1 carat

Conversion Factors

Length—

1 inch=2.54 centimetres

1 foot=30.48 centimetres

1 yard=91.44 centimetres

1 mile=1.61 kilometres

1 nautical mile (UK)=1,853.18 metres

1 nautical mile (international)=1,852 metres

Volume—

1 cubic foot=0.028 cubic metre

Area—

1 square foot=0.093 square metre

1 square yard=0.836 square metre

1 square mile=2.59 square kilometres

1 acre=0.405 hectare

Capacity—

1 gallon (Imperial)=4.55 litres

1 seer (80 tolas)=0.937 litre

1 Madras measure=1.77 litres

Temperature—

T° Fahrenheit=9/5 (T° centigrade) + 32

Weights in existence in Raichur district prior to the introduction of Metric Weights and their equivalents

Chataks (1 chatak = 5 tolas)	Grams (to the nearest gram)	Chataks (1 chatak = 5 tolas)	Grams (to the nearest gram)
1	58	9	525
2	117	10	583
3	175	11	642
4	233	12	700
5	292	13	758
6	350	14	816
7	408	15	875
8	467		

Seers (1 Sr. = 80 tolas)	Kilograms	Grams (to the nearest 10 grams	Seers (1 Sr. = 80 tolas)	Kilograms	Grams (to the nearest 10 grams
1	..	930	21	19	600
2	1	870	22	20	530
3	2	800	23	21	460
4	3	730	24	22	390
5	4	670	25	23	330
6	5	600	26	24	260
7	6	530	27	25	190
8	7	460	28	26	130
9	8	400	29	27	60
10	9	330	30	27	990
11	10	260	31	28	930
12	11	200	32	29	860
13	12	130	33	30	790
14	13	60	34	31	720
15	14	..	35	32	660
16	14	930	36	33	590
17	15	860	37	34	520
18	16	800	38	35	460
19	17	730	39	36	390
20	18	660			

Maunds (one maund = 40 seers	Kilograms (to the nearest kilogram)	Maunds (1 maund = 40 seers	Kilograms (to the nearest kilogram)
1	37	11	411
2	75	12	448
3	112	13	485
4	149	14	523
5	187	15	560
6	224	16	597
7	261	17	635
8	299	18	672
9	336	19	709
10	373	20	746

Source : Office of the Controller of Weights and Measures, Bangalore

Metric Weights and their nearest equivalents in F.P.S. System and in the district of Raichur

Sl. No.	Weights in Metric System (1 kg. = 1,000 gms.)		Equivalents in F.P.S. System		Equivalents in the District of Raichur		
	Kgs.	Gs.	Lbs.	Ozs.	Mds.	Srs.	Tolas
1	50	..	110	3-5/8	1	13	44
2	20	..	44	1-1/2	0	21	32
3	10	..	22	3/4	0	10	56
4	5	..	11	3/8	0	5	28
5	2	..	4	6-¼	0	2	9-3/5
6	1	..	2	3¼	0	1	4-4/5
7		500	1	1-3/5	0	0	43
8		200	0	7	0	0	17
9		100	0	3-1/2	0	0	8-1/2
10		50	0	1-3/4	0	0	4-1/3
11		20	0	7/10	0	0	1-3/4
12		10	0	7/20	0	0	17/20
13		5	0	7/40	0	0	17/40
14		2	0	7/100	0	0	17/100
15		1	0	7/200	0	0	17/200

Measures which were in use in Raichur district and their equivalents

	Seer	Pav	Chatak	Seer	Millilitre
2 litres ..	2	..	2	1	934
1 litre ..	1	..	1	1/2	467
500 ml ..	0	2	½	1/4	233
200 ml ..	0	..	3-2/5	1/8	117
100 ml ..	0	..	1-7/10	1/16	58
50 ml ..	0	..	17/20	1/32	29
20 ml ..	0	..	17/50		

Denominations of litre measures in use

20 litres	1 litre	50 ml
10 litres	500 ml	20 ml
5 litres	200 ml	
2 litres	100 ml	

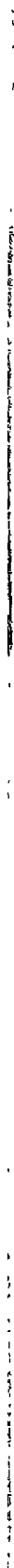
Cylindrical-type Aluminium, Brass and Stainless Steel pouring and dipping measures for liquids only.

G. I. Conical measures for kerosene and motor oils only.

1 gallon = 4.55 litres

1 litre = 1,000 millilitres

Statement showing the Demand, Collection and Balance of Land Revenue in Raichur District from 1957-58 to 1967-68.

Sl. No.	Year	Demand	Collection	Balance
		Rs.	Rs.	Rs.
1.	1957–58	42,24,084	14,17,672	28,06,412
2.	1958–59	39,69,099	12,69,269	26,99,830
3.	1959–60	36,61,843	9,66,009	26,95,835
4.	1960–61	35,59,561	6,61,979	28,97,581
5.	1961–62	62,87,080	30,61,946	32,25,144
6.	1962–63	56,86,124	7,96,529	68,89,595
7.	1963–64	79,57,377	22,58,425	56,98,952
8.	1964–65	1,22,28,956	38,81,673	83,47,282
9.	1965–66	1,41,57,582	35,53,267	1,06,04,315
10.	1966–67	1,44,82,338	21,86,906	1,22,96,431
11.	1967–68	1,82,23,773	34,57,642	1,47,66,130

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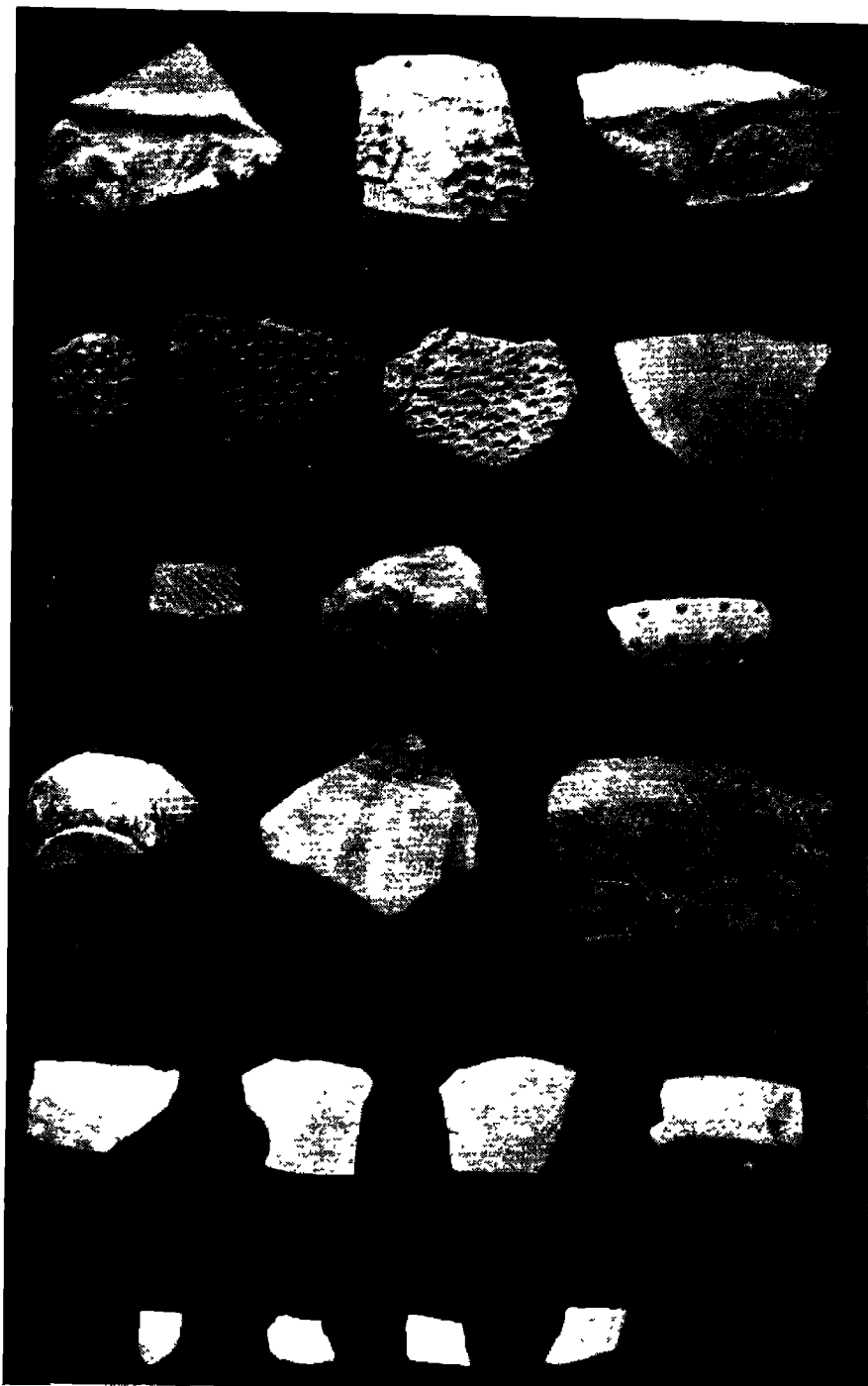
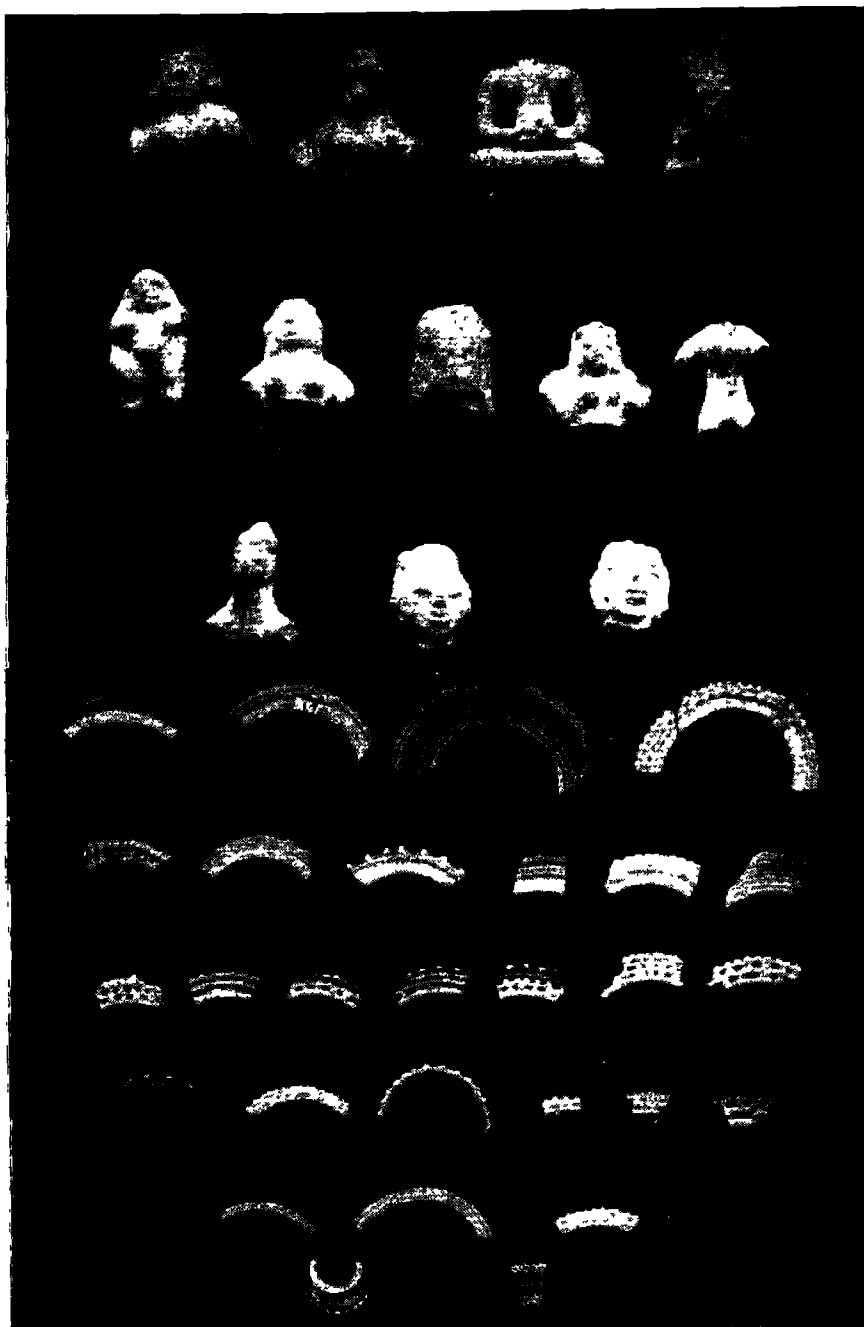
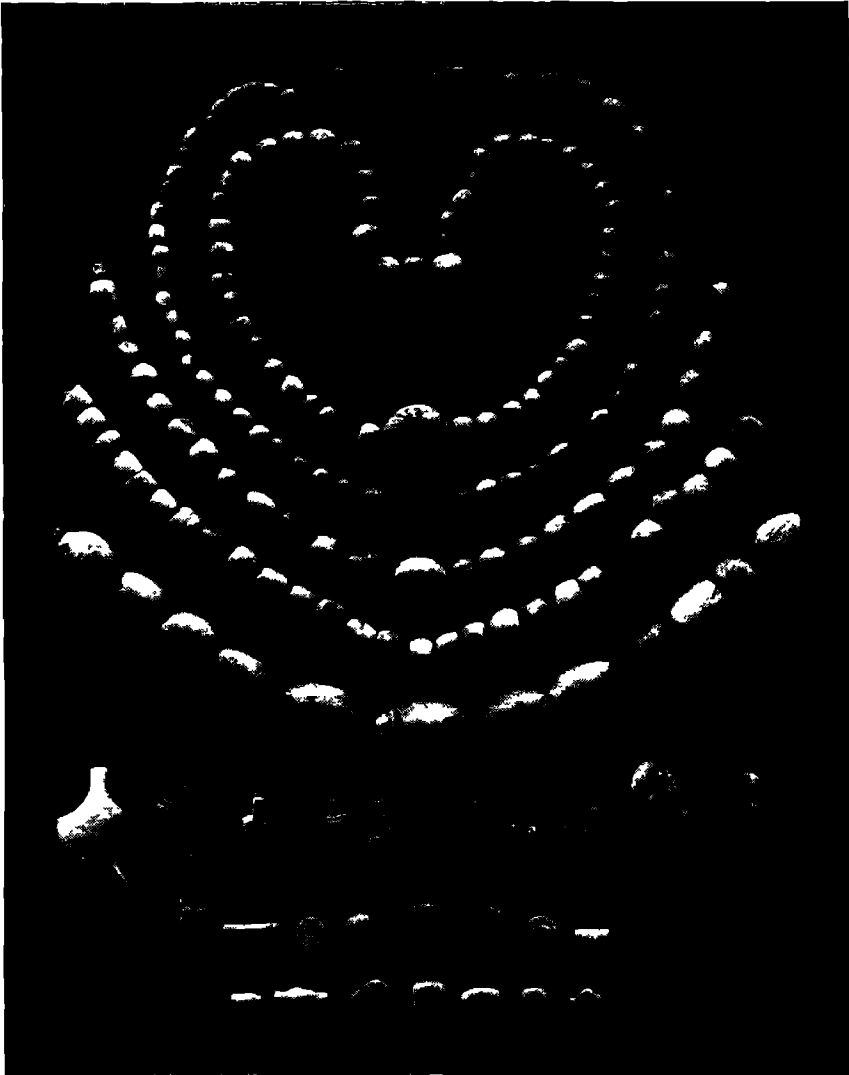
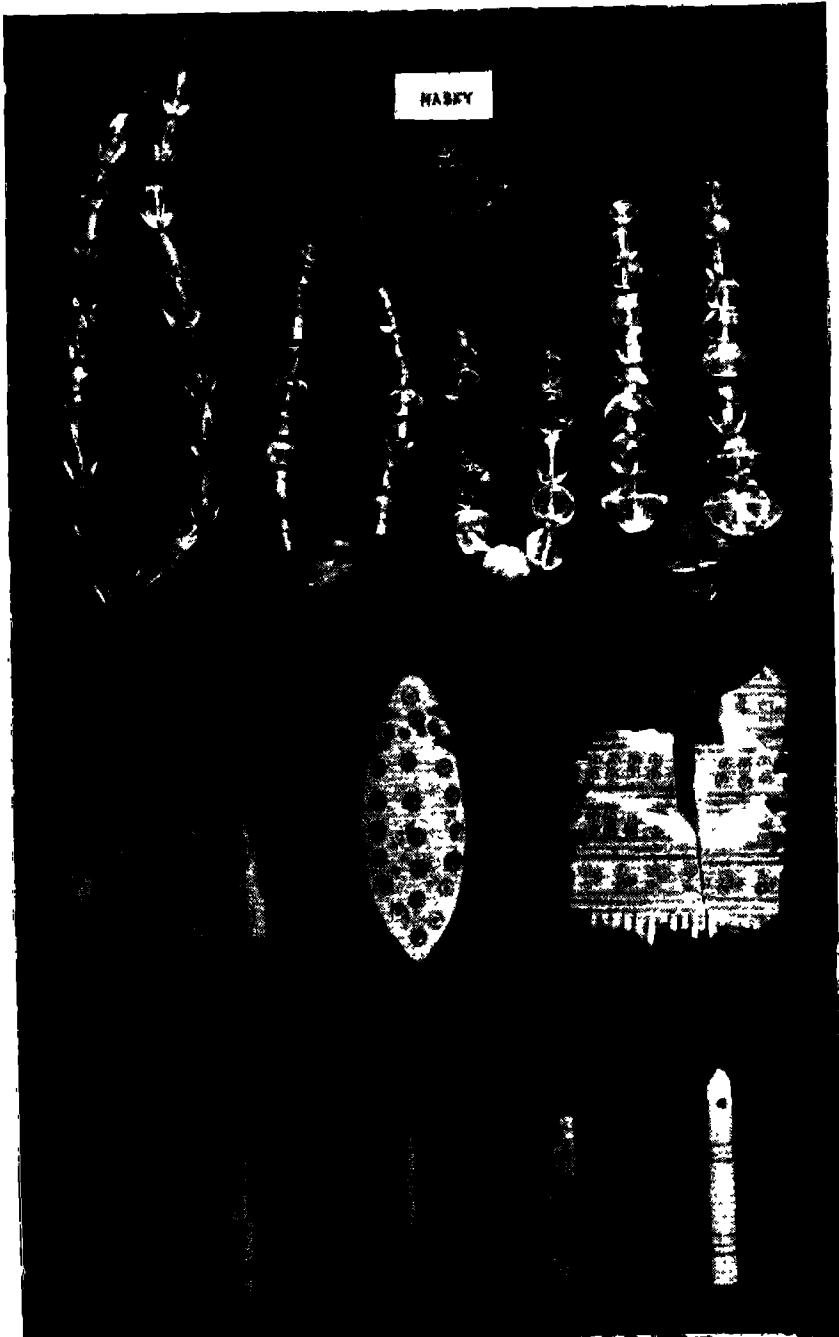

Designed and painted pottery from Maski excavations (*See* Chapter II).

(By courtesy of the Directorate of Archaeology and Museums, A.P., Hyderabad)

Clay figurines (above) and glass bangle pieces (below) from Maski excavations.

(*See* **Chapter II**)

(By courtesy of the Directorate of Archaeology and Museums, A.P., Hyderabad)

Shell objects from Maski excavations (*See* **Chapters II and XIX**).

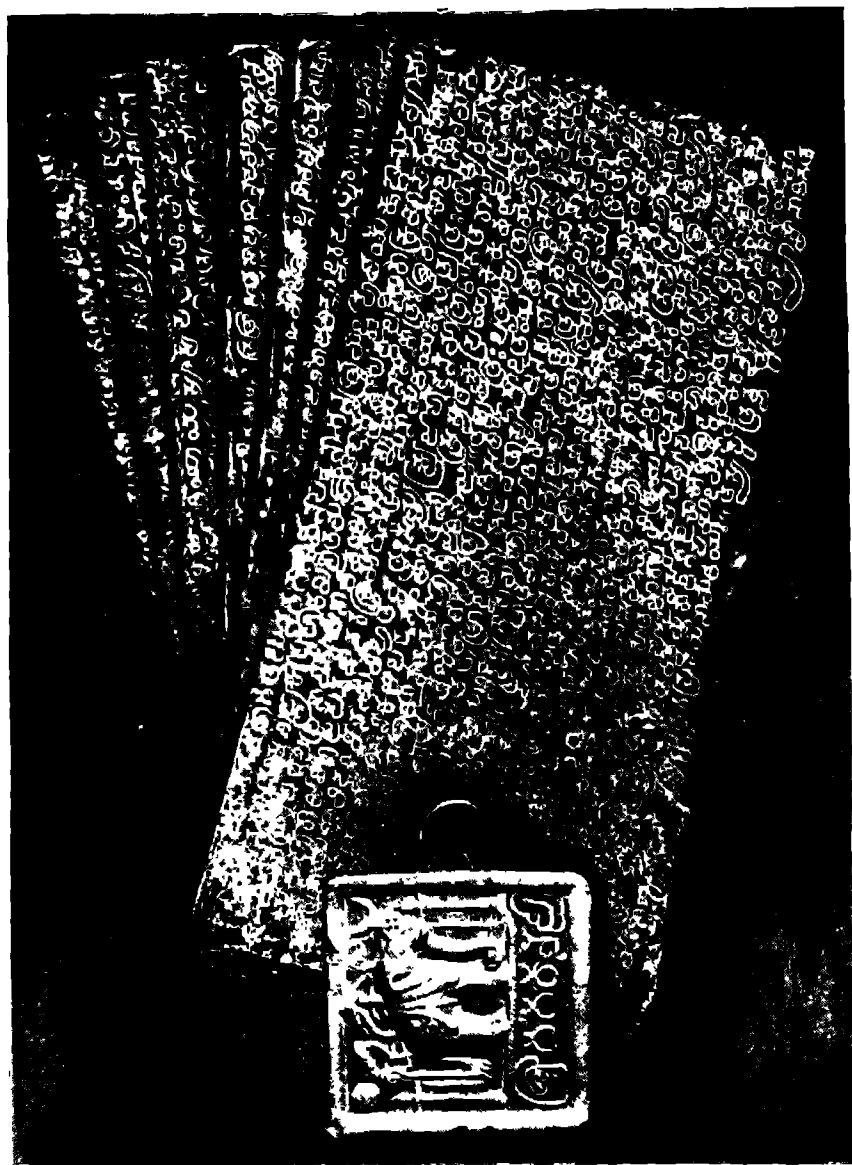
(By courtesy of the Directorate of Archaeology and Museums, A.P., Hyderabad)

Crystal bead necklaces (above) and ivory objects (below) from Maski excavations.
(*See* **Chapters II and XIX**)

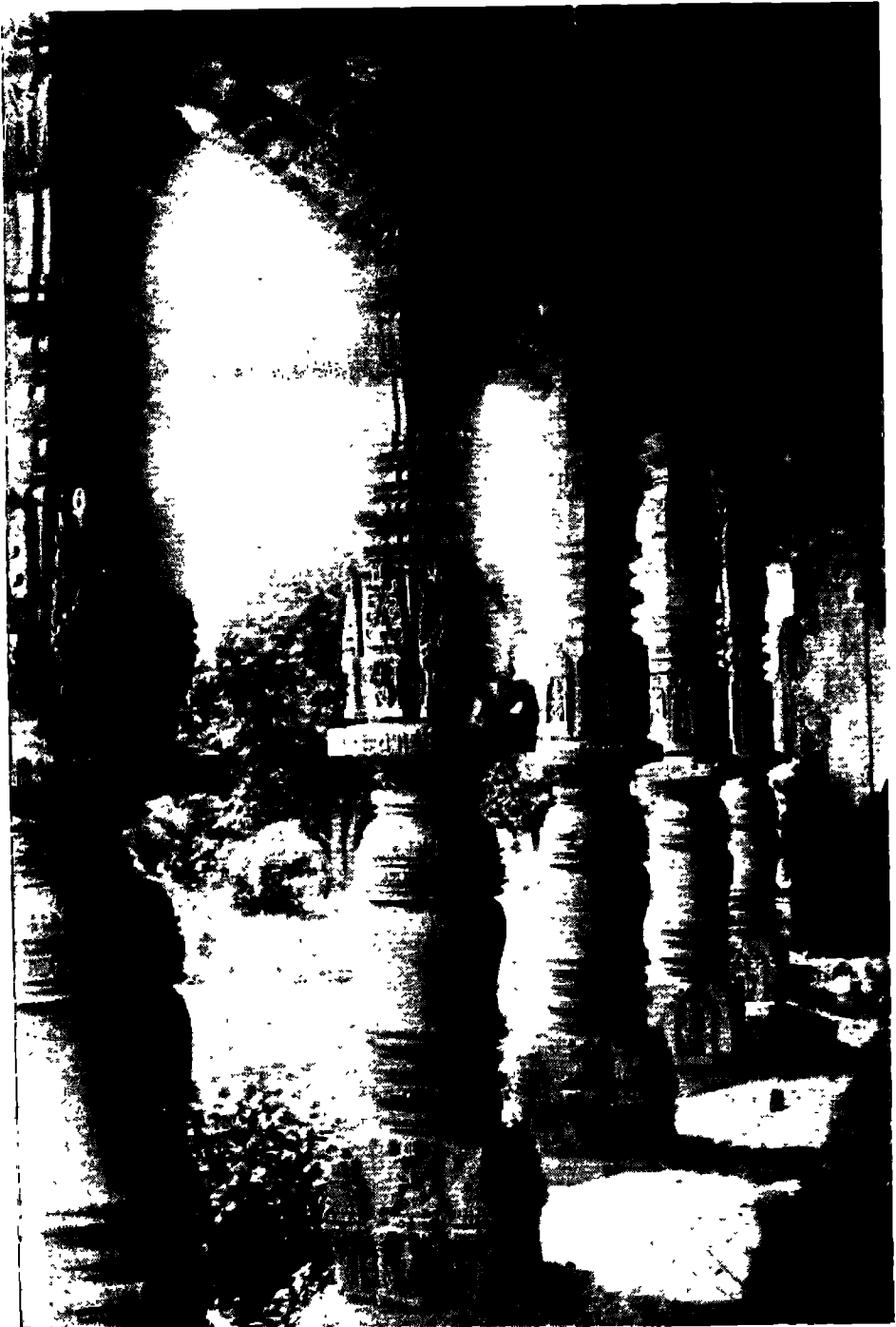
(By courtesy of the Directorate of Archaeology and Museums, A.P., Hyderabad)

Ashokan inscription near Maski in Lingsugur taluk. (*See* **Chapters II and XIX and general Appendices**).

(*By courtesy of the Archaeological Survey of India*)

Ashokan inscription at Gavimatha, Koppal. (*See* **Chapters II and XIX and general Appendices**).

(By courtesy of the Archaeological Survey of India)

Copper-plate grant (968 A.D.) of Ganga Marasimha III, discovered recently at Kuknur in Yelburga taluk. (*See* **Chapter II, p. 44**)

(*By courtesy of the Kannada Research Institute, Dharwar*)

Decorated pillars of the Oncha-Appa Matha at Anegundi in Gangavati taluk.

(*See* Chapter II under Archaeology and Chapter XIX under Anegundi)

(By courtesy of the Directorate of Archaeology and Museums, A.P., Hyderabad)

The Kanakachalapathi temple complex at Kanakgiri in Gangavati taluk.

Royal bath at Kanakgiri, built by Venkatappa Naik in the late Vijayanagara period.

Wooden statues in Kanakachalapathi temple, Kanakgiri, made about 60 years back. **(*See* Chapter XIX, P. 702)**

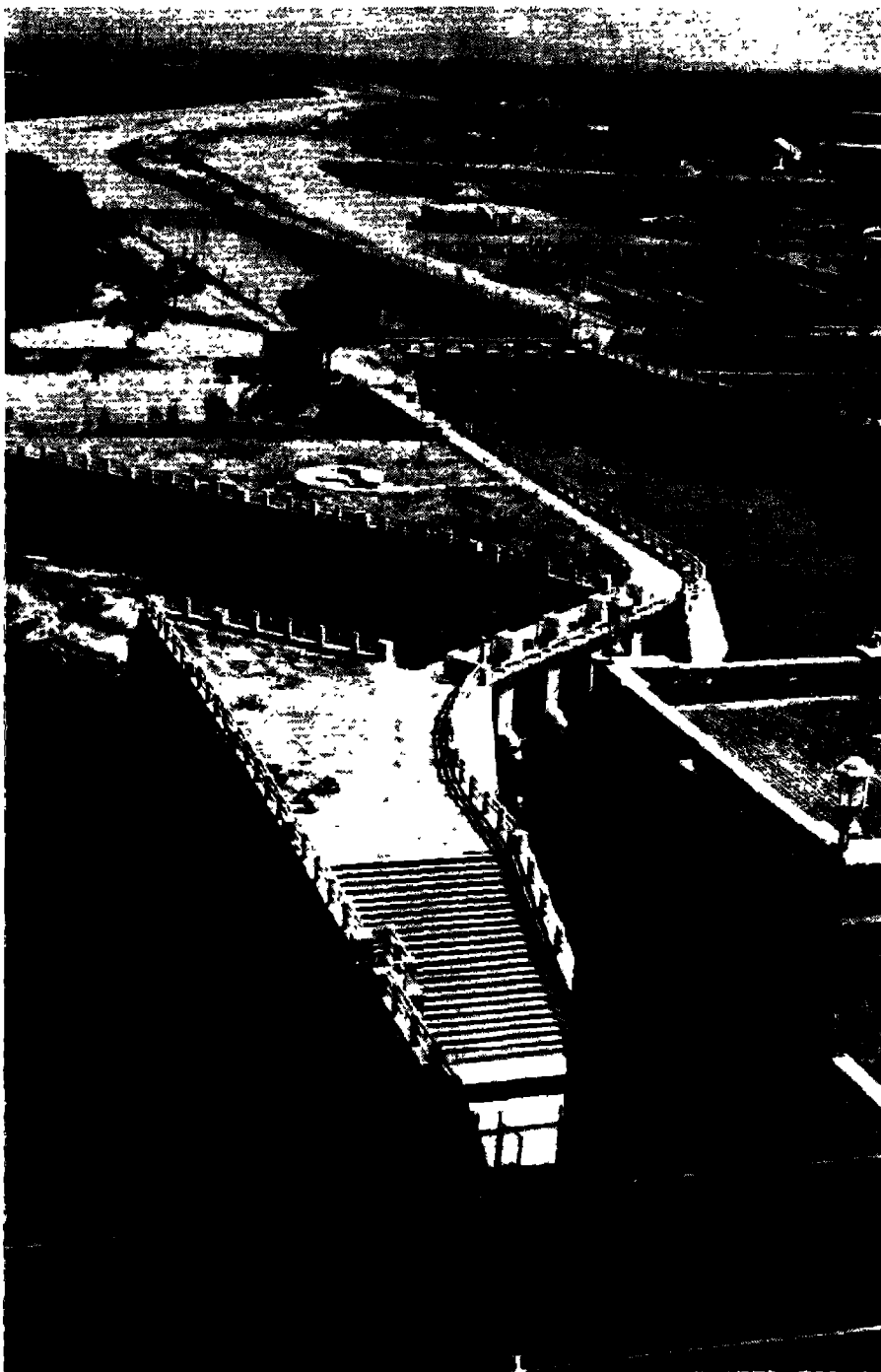
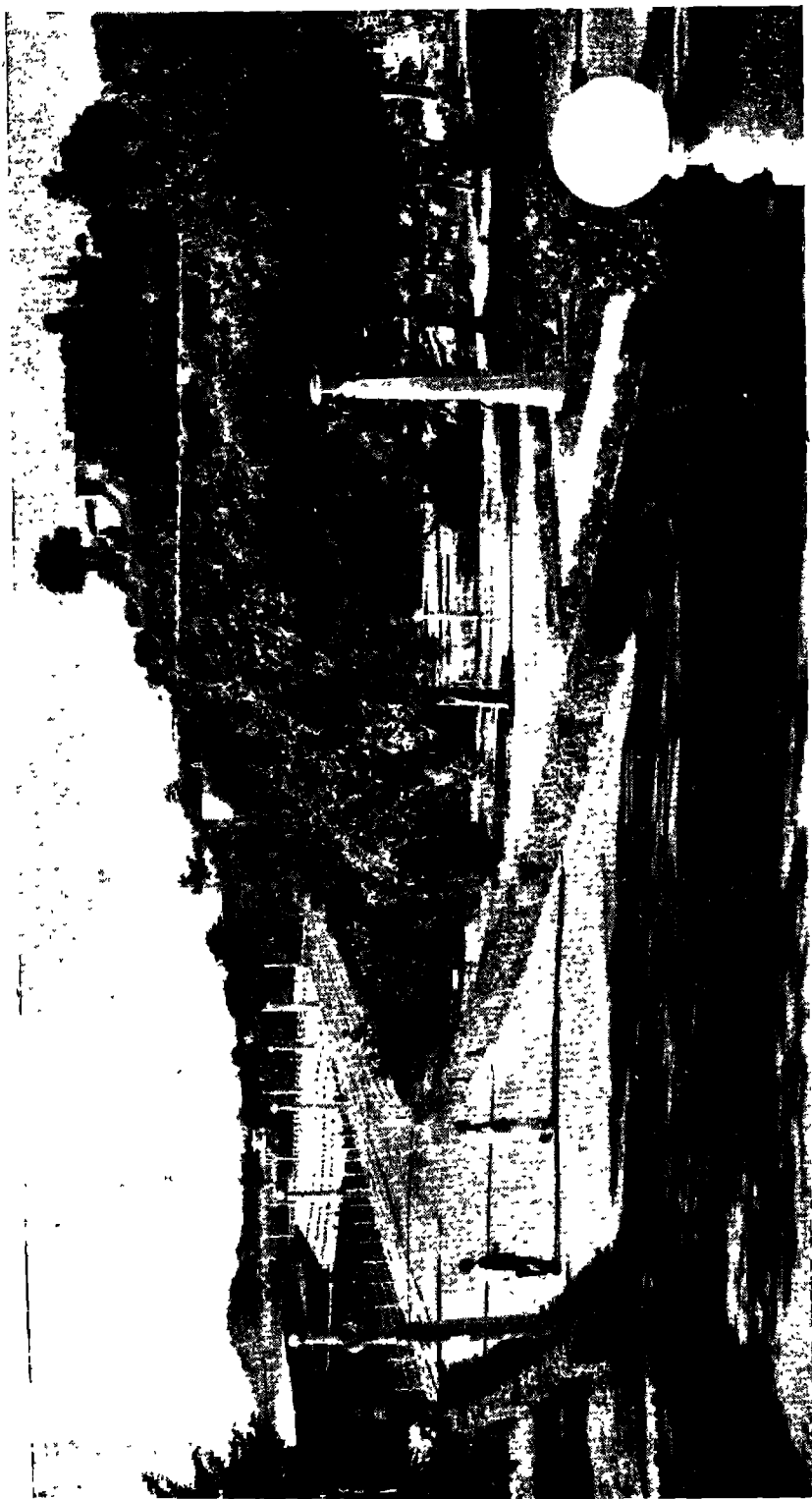
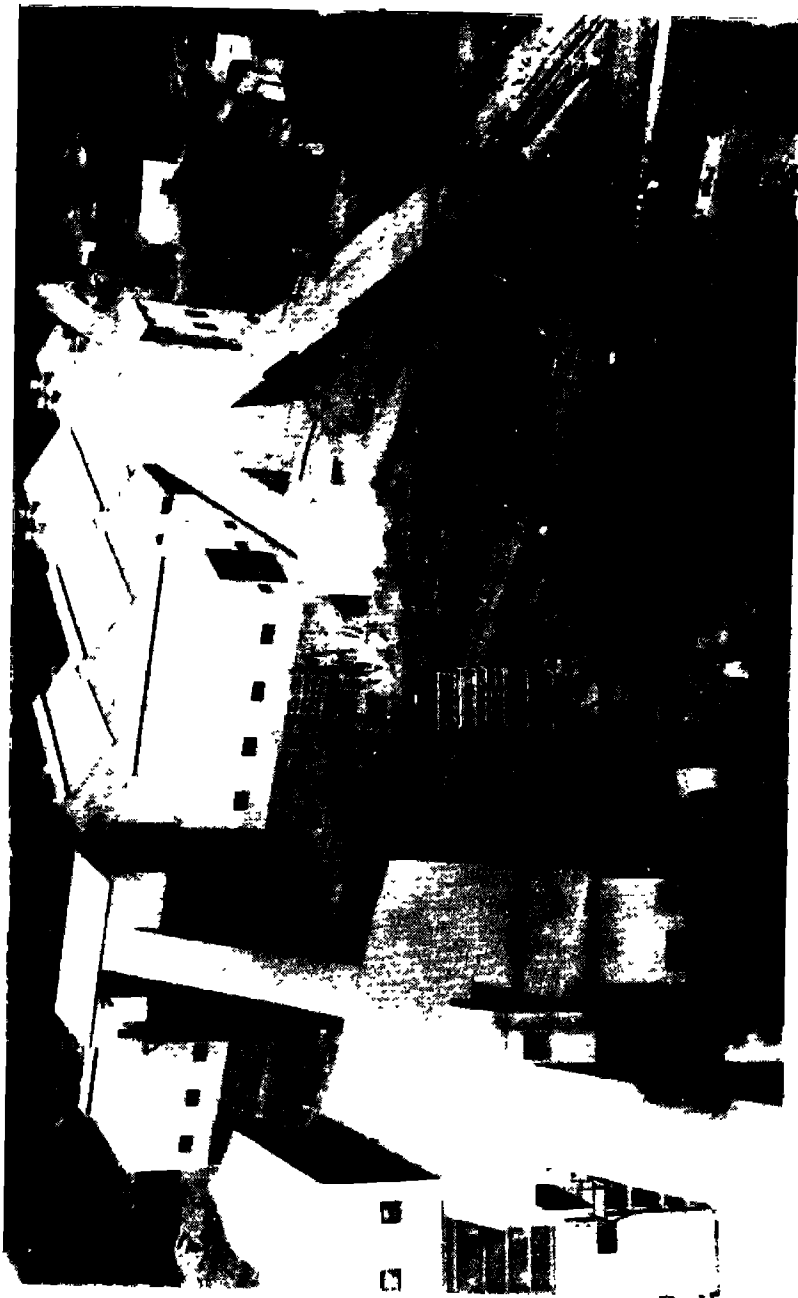
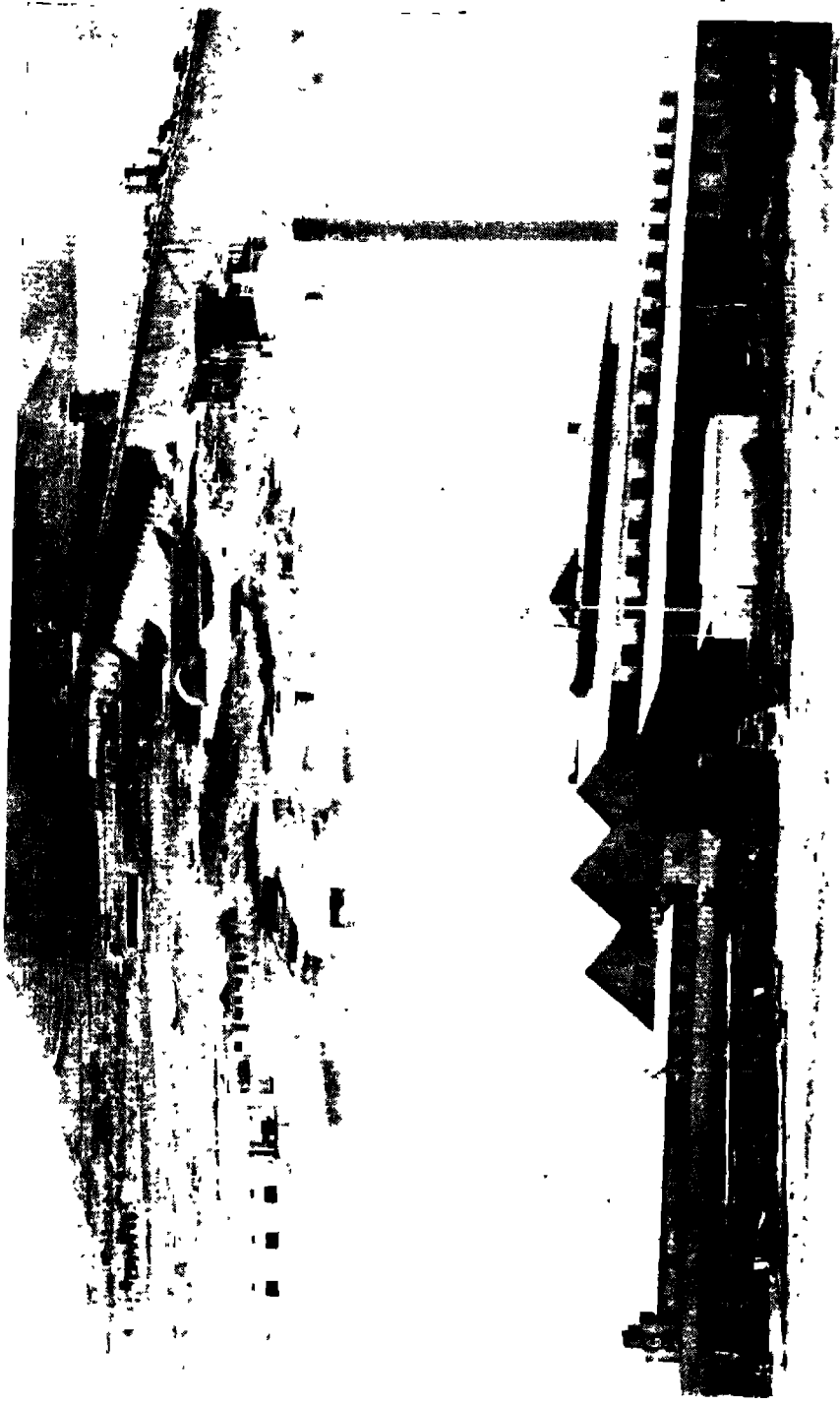
(By courtesy of Sri Jaithirth Rajpurohit, Raichur)

A general view of the Raichur fort. **(*See* Chapter II under Archaeology and Chapter XIX under Raichur)**

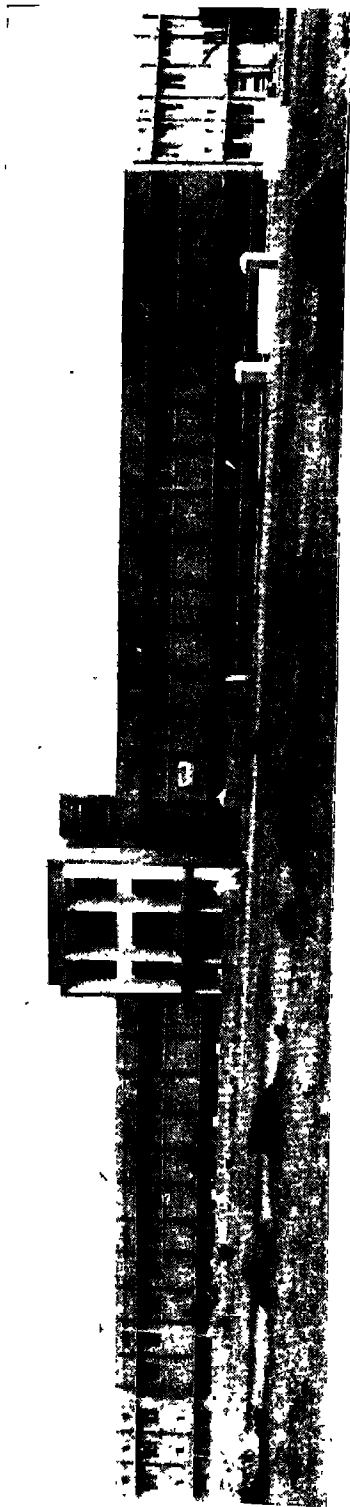
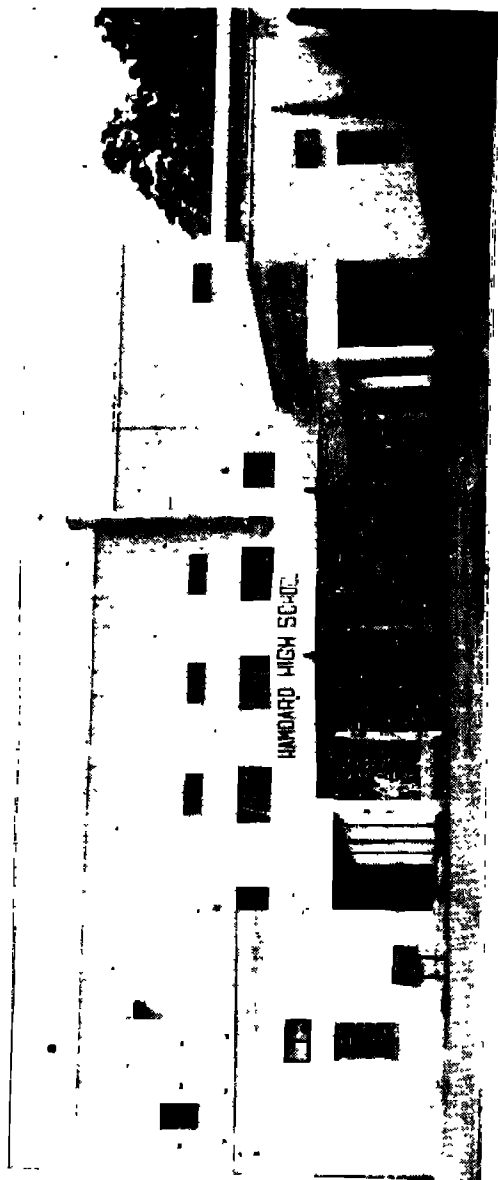
A sectional view of the Mudgal fort in Lingsugur taluk. Seen in the foreground is the moat encircling the fort.

(*See* Chapter II under Archaeology and Chapter XIX under Mudgal)

A bird's eye-view of the gigantic Tungabhadra dam (with its left bank power house) as seen from Munirabad side.

(*See* Chapter IV under Irrigation)

A picturesque view of the Tungabhadra Left Bank Canal below the dam.
(*See* Chapter IV under Irrigation)

A view of Munirabad Camp Area near the Tungabhadra dam, with the Kailas Guest House at the background (atop a hillock on the right).

Ore Treatment Plant of the Hutti Gold Mines in Lingsugur taluk. (*See* Chapter V under Large-scale Industries)

A general view of the Salar Jung Sugar Mills, Munirabad, with the Tungabhadra dam at the background.

(*See* Chapter V under Large-scale Industries)

A sectional view of the Solvent Extraction Plant of the Faruk Anwar Oil Mills at Raichur. (*See* Chapter V)

Picture above :
Government Polytechnic, Raichur.

Picture below :
Hamdard High School. Raichur.

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ADDENDA ET CORRIGENDA

Page No.	*Add*
93 After the 6th paragraph	6a. M. Rama Rao. *Glimpses of Deccan History*, 1951, p. 22.
356 Under Telegraphs	There were 33 combined post and telegraph offices in the district as on 31-12-1969.

Page No.	*Line No.*	*For*	*Substitute*
3	5	'Rajooru'	'Raicoru'
3	34	14,007.9	14,077.9
5	13	contestents	contestants
5	40	All the taluks which formed the	All the other taluks of the
14	25	Ohter	Other
30	39 (Against Benkal)	Deodurg	Gangavati
31	4	Matbal	Mudval
32	7	resemblance with	resemblance with those found at
33	5	counrties	countries
38	18	it.	it. 6a
44	43	This plate	These plates
45	21	was	were
56	43	Koppam (modern Koppal)	Koppam (modern Koppal?)
58	35	appears	appear
62	12	1231	1321
64	18	has	had
65	11	Madural	Madurai
72	42	Praudha Devaraya	Praudharaya
76	21	members	embers
77	7	traitrous	traitorous
78	1	Kilic	Kilich
80	30	*Hyderabad'* [87]	*Hyderabad'* [84]
82	23	Anne	Annie
85	10	Ittehad-	Ittehad-
80	38	hormonised	harmonised
93	26	*Deccan History*	*Daccan History*
94	22	the Tungabhandra	the Tungabhadra
96	8	painting	planting
96	14	*A Corpus of the Inscriptions*	*A Corpus of Inscriptions*
97	21	*Historic Landmarks*	*Historical Landmarks*
98	41	Indi-Moslemica	Indo-Moslemica
108	35	Apostles creed	Apostles' creed
110	38	insistance	insistence
111	6	as already mentioned	as mentioned elsewhere

Page No.	*Line No.*	*For*	*Substitute*
113	25-26	at Lingsugur	in Lingsugur taluk
115	20	former	traditional
115	21	taken to	taken mainly to
116	29	existance	existence
121	18	most	many
124	34	fifteen	eighteen
124	Last line	Karomma *Jatra*	Karemma (Chowdeshwari) *Jatra*
135	19	Rs. 5,59,000	Rs. 5,59,00,000
146	11	Kal	Akal
147	4	rotation	ration
147	34	Tunghabhadra	Tungabhadra
151	28	alternatively.	alternately.
153	19	taulk	taluk
153	43	on	relating to
155	32	a Ogee-shaped	an ogee-shaped
157	Footnote line 1	Tungabhadra Board, Bellary District.	Tungabhadra Board, Hospet, Bellary District,
159	44-45	Andhra, Madras and Mysore	Andhra, Hyderabad and Mysore
160	27	rehabilitation of villages submerged	rehabilitation of people of villages submerged
164	13	provided	completed
168	2	1967, and the year	1967, the year
168	37	bifurcates itself	will be bifurcated
171	5	and Godavari	, Godavari and other
181	8	this reason.	the latter reason.
184	Penultimate line	prices	prizes
191	35	Recently	Since recent years
207	8 (Column 7)	7,145	7,135
207	10 (Column 10)	955	1,015
207	12 (Column 7)	491	492
224	23	5,13,250	5,13,240
236	Last line	280.09	270.9
237	8	819.30	919.30
237	8	984.09	848.09
237	9	1,099.39	1,189.39
237	9	1,270.20	1,134.20
238	8	Censuss	Censuses
248	33	Reservior	Reservoir
251	Footnote line 1	Persons	Households
251	,,	who	which
252	14 (Column 5)	2,18,415-36	2,17,745-36
252	14 (Column 10)	5,98,503-16	5,98,594-16
254	17 (Column 7)	3,335-38	3,380-38

Page No.	*Line No.*	*For*	*Substitute*
262	27	from 1887—1899	from 1887 to 1899
281	20	the part	a part
283	9 (Column 4)	633	634
284	33	units	units helped by the Khadi and Village Industries Board
287	1	Jayandras	Jyandras
290	Penultimate line	handlom	handloom
298	21 (Column 3)	42	43
298	28	four	five
298	28–29	the co-operative fold.	these co-operative societies.
302	40	40,24,500	40,24,000
304	17 (Sl. No.15 under Raichur and Total)	1	4
307	18	revcoered	recovered
311	11	futrher	further
320	2	deposit	deposits
342	7	3,22,891–57	3,22,893–57
342	27 (Under total)	28,854–60	28,854–10
343	19 (Under total)	16,075–64	16,075–54
343	20 (Under total)	72,354–54	70,354–54
352	Footnote line 1	Dr. V. V. Ramanandhan	Dr. V. V. Ramanadhan
356	8 (Column 7)	29.50	29.00
358	Sl. No. 15 (Columns 3 and 5)	111	101
359	Sl. No. 19 line 2 and Sl. No. 20 line 2	Keralapur	Kesalapur
360	Sl. No. 54	Raichur-Kardi Road	Raichur-Buduldipad Road
370	7	Yergirhalli-Alanapur Road	Yergirhalli-Almapura Road
373	Expenditure table	Expenditure on	Expenditure on (Rs. in lakhs)
375	Footnote	Dr. V. V. Ramanandhan	Dr V. V. Ramanadhan
386	1	envelops	envelopes
390	21	medical profession	medical and health services
390	31	549	539
396	27	buttons,	buttons, threads,
399	17	*embada*	*ambada*
410	26 (Columns 2 to 7)	Rs. P.	Seer Chatak
415	Footnote	1964	1954
416	38	level	levels
419	33	makes	make
423	18	houses.	house.
423	21	makes	make
428	11 (Under total)	5,501	5,531

Page No.	*Line No.*	*For*	*Substitute*
430	10	1912	1952
433	10 (Under stage II against Gangavati)	..	½
450	14	and also the	and also to the
475	23	Rs. 1.54	Rs. 1.53
475	30	Rs. 6.43	Rs. 3.43
488	13	assesment	assessment
489	17	thereform	therefrom
491	12	wihout	without
491	22	Land	Lands
500	17 (Under total)	4,50,501	4,50,531
520	Last line	60	69
528	14 (Under total)	*679*	*670*
530	24	distict	district
530	28	aboished	abolished
534	40	veterinay	Veterinary
544	30	co-opration	co-operation
576	7	1956	1959
582	34	peripetatic	peripatetic
588	8	orphans	orphans also
605	32	syallabi	syllabi
615	2	Polytechines	Polytechnics
615	27	costed	cost
618	10	Officer.	Office,
624	25	His	Among his
625	40 41	*Achi-Eche*	*Achi-Iche*
635	30	reponsible	responsible
637	10	Asthama	Asthma
639	5	Vacciniation	Vaccination
641	Penultimate line	, there is a certain amount of	, there are, to a certain extent.
651	*See* the next page,	*i.e.*, 652, after 653	
654	14	Diptheria	Diphtheria
661	20 (Column 5)	contribution	contribution in Rs.
661	42	Vasanthdal	Vasantlal
666	27	women	women's
667	15	schemes	scheme
670	31-32	Mahendar temple, temple	Mahendra temple.
680	18	persons voted	persons who voted
689	14	Mandal and is	Mandal which is
700	26	arabasque	arabesque
703	15	portion	portions
		typically of Chalukyan	typically Chalukyan
		[illegible]dra	Tungabhadra

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